# CONTRACT DOCUMENTS FOR THE

## SOUTH EGREMONT VILLAGE SCHOOL FOUNDATION STABILIZATION PROJECT

BID DATE: DECEMBER 7, 2017



PREPARED FOR THE TOWN OF EGREMONT

EVELYN COLE SMITH ARCHITECTS, LLC

PO BOX 182 · 134 MAIN STREET · PUTNAM, CT · 06260 · 860.315.9570

### SOUTH EGREMONT VILLAGE SCHOOL FOUNDATION STABILIZATION PROJECT

#### TABLE OF CONTENTS

Invitation for Bids

Instructions to Bidders

Attachment A – Prevailing Wages

Bid Response

Bid Proposal

**Unit Prices Form** 

Alternates Form

**OSHA** Certification

Non-Collusive Affidavit

Certificate as to Corporate Bidder

Certificate as to Payment of State Taxes

Bidders Certification Regarding Payment of Prevailing Wages

Certificate of Debarment

Certificate of Foreign Corporation

Bidders Qualifications Form

Attachment B – Owner – Contactor Agreement

Attachment C – General Terms and Conditions

**Technical Specifications** 

### TOWN OF EGREMONT SOUTH EGREMONT VILLAGE SCHOOL

#### INVITATION FOR BID

The Town of Egremont, Massachusetts is seeking bids for the stabilization of the foundation and an alternate bid for accessibility improvements at the South Egremont Village School, listed on the State Register of Historic Places. All work must comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties. The project is partially funded with a grant from the Massachusetts Historical Commission.

Bids shall be submitted to Mary Brazie, Office Administrator, Town of Egremont, (P.O. Box 368) 171 Egremont Plain Road, Egremont, MA 01258, no later than 1 PM on Thursday, December 7, 2017, and will be publicly opened and read at that time. Sealed envelopes shall be clearly marked "Bid for South Egremont Village School Stabilization."

There will be a pre-bid site walk at the project site, 42 Main Street, South Egremont, on Thursday, November 16, 2017 at 3:00 PM. Questions from potential bidders shall be submitted in writing either via email or mail to Mary Brazie, Office Administrator, at the address listed above, or to tegremont@egremont-ma.gov. Bid documents are posted on the Town website: <a href="http://www.egremont-ma.gov">http://www.egremont-ma.gov</a> or by request from Lyn Smith at lyn@ecsarchitects.com.

Each bid shall contain the following:

- 1. Completed Bid form
- 2. Signed Certificate of Tax Compliance
- 3. Signed Certificate of Non-Collusion
- 4. Signed Certificate of Authority
- 5. Affidavit of OSHA Compliance
- 6. DCAM certification

Contractors shall be DCAM certified and experienced with the Secretary of the Interior's Standards for the Treatment of Historic Properties, and shall be able to identify having completed prior comparable work on at least 2 properties during the past five years that are listed on the National Register of Historic Places. State Law prohibits discrimination. The selection of the contractor shall be made without regard to race, color, sex, age, religion, political affiliation, or national origin. The Town reserves the right to reject any and all bids, to waive any informalities, to advertise for new bids, and to award one or more contracts, wholly or in part, as may be deemed to be in the best interest of the Town. The Board of Selectmen shall be the awarding authority.

The successful bidder will provide insurance as stated in the Owner-Contractor Agreement. A certificate of insurance evidencing the required insurance shall be submitted to the town prior to the commencement of work and shall remain in force during the term of the contract.

If any questions, contact:
Mary Brazie, Selectman and Office Administrator
Town of Egremont - 171 Egremont Plain Road - P.O. Box 368 - Egremont, MA 01258
413-528-0182 phone

413-528-5465 fax

email: tegremont@egremont-ma.gov

#### TOWN OF EGREMONT SOUTH EGREMONT VILLAGE SCHOOL

#### INSTRUCTIONS TO BIDDERS

Awarding Authority: Town of Egremont

Title: South Egremont Village School Foundation Stabilization

#### **Base Project Scope:**

Stabilization including renovation of existing foundations and construction of replacement foundations. (Lump sum bid) Alternate One to include Universal Accessibility Improvements.

Bids shall be submitted to Mary Brazie, Office Administrator, Town of Egremont, 171 Egremont Plain Road, Egremont, MA 01258, no later than December 7, 2017 at 1 PM, and will be publicly opened and read at that time. Sealed envelopes shall be clearly marked "Bid for South Egremont Village School Foundation Stabilization."

The minimum wage rate requirements for this Contract are located in Attachment A.

Bid forms for this Contract are located in Bid Response section.

The applicable minority and women workforce utilization percentage is 10.4% combined MBE/WBE.

The time for completion of the Work is specified in Article 6 of the Owner - Contractor Agreement.

Bidding Documents may be obtained at the Office of the Administrator at the above address or on the Town website: http://egremont-ma.gov.

As used herein, capitalized terms shall have the meaning assigned to them in the General Conditions of the Contract and the Owner - Contractor Agreement unless the context clearly indicates otherwise.

#### ARTICLE 1 - BIDDER'S REPRESENTATION

- 1.1 Each Bidder by making a bid represents that:
  - 1. The Bidder has read and understands the Contract Documents and the bid is made in accordance therewith.
  - 2. The Bidder has visited the site and is familiar with the local conditions under which the Work has to be performed.
- 1.2 Failure to so examine the Contract Documents and site will not relieve any Bidder from any obligation under the bid as submitted. Neither the Commonwealth nor the Designer will be responsible for errors, omissions and/or charges for extra work arising from Bidder's failure to familiarize itself with the Contract Documents or existing conditions.

#### **ARTICLE 2 - REQUESTS FOR INTERPRETATION**

- 2.1 Bidders shall promptly notify the Awarding Authority of any ambiguity, inconsistency, or error which they may discover upon examination of the Contract Documents, the site, and local conditions. Such notification must be received by the Awarding Authority well before the date bids are due in order to provide sufficient time for the Awarding Authority to review the notification and respond before the date bids are due if the Awarding Authority deems it appropriate.
- 2.2 Bidders requiring clarification or interpretation of the Contract Documents shall make such request to the Awarding Authority in the time frame set forth in 2.1 above.
- 2.3 It is the sole responsibility of the Bidder to ascertain the existence of any addenda issued by the Awarding Authority, whether or not the same are mailed to, or received by Bidder.

#### ARTICLE 3 - PREPARATION AND SUBMISSION OF BIDS

- 3.1 Bids shall be submitted on the "Bid Proposal" form as appropriate, furnished at no cost by the Awarding Authority.
- 3.2 All entries on the Bid Form shall be made by typewriter or in ink.
- 3.3 Where so indicated on the Bid Form, sums shall be expressed in both words and figures. Where there is a discrepancy between the bid sum expressed in words and the bid sum expressed in figures, the words shall control.
- 3.4 Each bid must be accompanied by a Bid Deposit. Bid Deposits shall be five (5%) percent of the highest possible bid amount, including all alternates. Bid Deposits shall be made payable to the Town of Egremont and shall be either in the form of cash, certified check, treasurer's or cashier's check issued by a responsible bank or trust company, or a bid bond issued by a surety licensed to do business in the Commonwealth of Massachusetts; and shall be conditioned upon the faithful performance by the principal of the agreements contained in the bid.
  - Bid deposits of the three (3) lowest responsible and eligible Bidders shall be retained until the execution and delivery of the Owner-Contractor Agreement.
- 3.5 The bid, including bid deposit, shall be enclosed in a sealed envelope with the following plainly marked on the outside:

#### **BID FOR:**

- -SOUTH EGREMONT VILLAGE SCHOOL FOUNDATION STABILIZATION
- -BIDDER'S NAME AND BUSINESS ADDRESS
- -PHONE NUMBER & CONTACT PERSON
- 3.6 Date and time for receipt of bids is set forth on page 1 of these Instructions to Bidders. Any bid not received by the applicable deadline will not be accepted.

3.7 Timely delivery of a bid at the location designated shall be the full responsibility of the Bidders.

#### **ARTICLE 4 - ALTERNATES**

4.1 Alternate One includes Universal Accessibility Improvements to site and building access and the construction of accessible toilet rooms.

#### **ARTICLE 5 - WITHDRAWAL OF BIDS**

#### 5.1 **Before Opening Bids**

- 5.1.1 Any bid may be withdrawn prior to the specified deadline for the receipt of bids provided that the withdrawal shall be made by a written request signed by a person having the authority to bind the Bidder. The written request must be hand delivered or otherwise delivered to the Awarding Authority's Bid Room addressed to the attention of the Chief Procurement Officer and must be received on or before the date and time appointed as the deadline for the receipt of bids.
- 5.1.2 Withdrawn bids may be resubmitted up to the time designated for the receipt of bids.

#### 5.2 After Opening Bids

A Bidder may withdraw its bid without penalty at any time up to the time of Award as defined below in subsection 8.1 only upon demonstrating to the satisfaction of the Awarding Authority that a death or disability has occurred or a bona fide clerical or mechanical error of a substantial nature was made during the preparation of the bid. Failure to demonstrate conclusively that a bona fide clerical or mechanical error of a substantial nature was made may result in forfeiture of the Bid Deposit.

#### ARTICLE 6 - CONTRACT AWARD

- 6.1 Award means the determination and selection of the lowest, responsible and eligible Bidder, by the Awarding Authority.
  - The Awarding Authority will award the contract to the lowest responsible and eligible Bidder within thirty (30) days, Saturdays, Sundays, and legal holidays excluded after the opening of bids.
- 6.2 The Awarding Authority reserves the right to waive any informalities in or to reject any or all bids if it be in the public interest to do so.
- 6.3 The Awarding Authority also reserves the right to reject any bid if it determines that such bid does not represent the bid of a person competent to perform the work as specified or if less than three (3) available bids are received.
- 6.4 The term "lowest responsible and eligible bidder" shall mean the Bidder (1) whose bid is

the lowest of those bidders possessing the skill, ability and integrity necessary for the faithful performance of the work; (2) who shall certify that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; (3) who, where the provisions of section eight B of chapter twenty-nine apply, shall have been determined to be qualified thereunder; and (4) who obtains within ten days of the notification of contract award the security by bond required under section twenty-nine of chapter one hundred and forty-nine.

#### ARTICLE 7 - FORMS REQUIRED AT CONTRACT APPROVAL

- 7.1 Upon award, the Bidder shall complete the following forms to ensure prompt contract validation. These forms will be provided to the Contractor by the Awarding Authority, and three (3) originals must be submitted.
  - 1 Owner Contractor Agreement.
  - 2 Form of Corporate Vote (If Applicable)
  - 3 Certificate of Compliance with State Tax Laws
  - 4 Payment and Performance Bonds (See General Conditions)
- 7.2 Insurance Certificates for the coverage required by Article 7 of the General Conditions must be submitted prior to contract execution by the Awarding Authority.
- 7.3 The Notice to Proceed with construction shall not be issued until the Owner Contractor Agreement has been executed.

#### ATTACHMENT A

#### PREVAILING WAGE SCHEDULE

The minimum wage rates provided in the following pages have been provided by the Division of Occupational Safety of the Massachusetts Department of Labor and Workforce Development. The Awarding Authority is not responsible for errors or omissions in such wage rates.

M.G.L. c. 149, §. 26 and 27 provide as follows:

"... Payments by employers to health and welfare plans, pension plans and supplementary unemployment benefit plans under collective bargaining agreements or understandings between organized labor and employers shall be included for the purpose of establishing minimum wage rates as herein provided. . . The aforesaid rates of wages in the schedule of wage rates shall include payments by employers to health and welfare plans, pension plans and supplementary unemployment benefit plans as provided in said section twenty-six, and such payments shall be considered as payments to persons under this section performing work as herein provided. Any employer engaged in the construction of such works who does not make payments to a health and welfare plan, a pension plan and a supplementary unemployment benefit plan, where such payments are included in said rates of wages, shall pay the amount of said payments directly to each employee engaged in said construction".



## THE COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT DEPARTMENT OF LABOR STANDARDS

#### **Prevailing Wage Rates**

As determined by the Director under the provisions of the Massachusetts General Laws, Chapter 149, Sections 26 to 27H

ROSALIN ACOSTA Secretary WILLIAM D MCKINNEY Director

Lt. Governor

Awarding Authority: Town of Egremont

Contract Number: City/Town: EGREMONT

Description of Work: Stabilization of the foundation and an alternate bid for accessibility improvements at the South Egremont Village

School. Partially funded with a grant from Massachusetts Historical Commission.

**Job Location:** 42 Main Street, South Egremont

Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

- This wage schedule applies only to the specific project referenced at the top of this page and uniquely identified by the "Wage Request Number" on all pages of this schedule.
- An Awarding Authority must request an updated wage schedule from the Department of Labor Standards ("DLS") if it has not opened bids or selected a contractor within 90 days of the date of issuance of the wage schedule. For CM AT RISK projects (bid pursuant to G.L. c.149A), the earlier of: (a) the execution date of the GMP Amendment, or (b) the bid for the first construction scope of work must be within 90-days of the wage schedule issuance date.
- The wage schedule shall be incorporated in any advertisement or call for bids for the project as required by M.G.L. c. 149, § 27. The wage schedule shall be made a part of the contract awarded for the project. The wage schedule must be posted in a conspicuous place at the work site for the life of the project in accordance with M.G.L. c. 149 § 27. The wages listed on the wage schedule must be paid to employees performing construction work on the project whether they are employed by the prime contractor, a filed sub-bidder, or any sub-contractor.
- All apprentices working on the project are required to be registered with the Massachusetts Department of Labor Standards, Division of Apprentice Standards (DLS/DAS). Apprentice must keep his/her apprentice identification card on his/her person during all work hours on the project. An apprentice registered with DAS may be paid the lower apprentice wage rate at the applicable step as provided on the prevailing wage schedule. Any apprentice not registered with DLS/DAS regardless of whether or not they are registered with any other federal, state, local, or private agency must be paid the journeyworker's rate for the trade.
- The wage rates will remain in effect for the duration of the project, except in the case of multi-year public construction projects. For construction projects lasting longer than one year, awarding authorities must request an updated wage schedule. Awarding authorities are required to request these updates no later than two weeks before the anniversary of the date the contract was executed by the awarding authority and the general contractor. For multi-year CM AT RISK projects, awarding authority must request an annual update no later than two weeks before the anniversary date, determined as the earlier of: (a) the execution date of the GMP Amendment, or (b) the execution date of the first amendment to permit procurement of construction services. Contractors are required to obtain the wage schedules from awarding authorities, and to pay no less than these rates to covered workers. The annual update requirement is not applicable to 27F "rental of equipment" contracts.
- Every contractor or subcontractor which performs construction work on the project is required to submit weekly payroll reports and a Statement of Compliance directly to the awarding authority by mail or email and keep them on file for three years. Each weekly payroll report must contain: the employee's name, address, occupational classification, hours worked, and wages paid. Do not submit weekly payroll reports to DLS. A sample of a payroll reporting form may be obtained at http://www.mass.gov/dols/pw.
- Contractors with questions about the wage rates or classifications included on the wage schedule have an affirmative obligation to inquire with DLS at (617) 626-6953.
- Employees not receiving the prevailing wage rate set forth on the wage schedule may report the violation to the Fair Labor Division of the office of the Attorney General at (617) 727-3465.
- Failure of a contractor or subcontractor to pay the prevailing wage rates listed on the wage schedule to all employees who perform construction work on the project is a violation of the law and subjects the contractor or subcontractor to civil and

**Issue Date:** 10/30/2017 **Wage Request Number:** 20171030-036

Classification	<b>Effective Date</b>	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Construction						
(2 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/01/2016	\$32.15	\$10.91	\$10.89	\$0.00	\$53.95
(3 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/01/2016	\$32.22	\$10.91	\$10.89	\$0.00	\$54.02
(4 & 5 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/01/2016	\$32.34	\$10.91	\$10.89	\$0.00	\$54.14
ADS/SUBMERSIBLE PILOT PILE DRIVER LOCAL 56 (ZONE 3)	08/01/2015	\$90.51	\$9.80	\$18.17	\$0.00	\$118.48
For apprentice rates see "Apprentice- PILE DRIVER"						
AIR TRACK OPERATOR  LABORERS - ZONE 4 (BUILDING & SITE)	12/01/2016	\$26.25	\$7.60	\$11.10	\$0.00	\$44.95
For apprentice rates see "Apprentice- LABORER"						
AIR TRACK OPERATOR (HEAVY & HIGHWAY)  LABORERS - ZONE 4 (HEAVY & HIGHWAY)	12/01/2016	\$27.17	\$7.60	\$12.45	\$0.00	\$47.22
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
ASBESTOS WORKER (PIPES & TANKS)	06/01/2017	\$31.41	\$11.50	\$6.60	\$0.00	\$49.51
HEAT & FROST INSULATORS LOCAL 6 (SPRINGFIELD)	12/01/2017	\$32.31	\$11.50	\$6.60	\$0.00	\$50.41
	06/01/2018	\$33.21	\$11.50	\$6.60	\$0.00	\$51.31
	12/01/2018	\$34.11	\$11.50	\$6.60	\$0.00	\$52.21
	06/01/2019	\$35.01	\$11.50	\$6.60	\$0.00	\$53.11
	12/01/2019	\$35.91	\$11.50	\$6.60	\$0.00	\$54.01
	06/01/2020	\$36.81	\$11.50	\$6.60	\$0.00	\$54.91
	12/01/2020	\$37.71	\$11.50	\$6.60	\$0.00	\$55.81
ASPHALT RAKER LABORERS - ZONE 4 (BUILDING & SITE)	12/01/2016	\$25.75	\$7.60	\$11.10	\$0.00	\$44.45
For apprentice rates see "Apprentice- LABORER"						
ASPHALT RAKER (HEAVY & HIGHWAY)  LABORERS - ZONE 4 (HEAVY & HIGHWAY)	12/01/2016	\$26.67	\$7.60	\$12.45	\$0.00	\$46.72
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
AUTOMATIC GRADER-EXCAVATOR (RECLAIMER)	06/01/2017	\$33.88	\$10.79	\$12.75	\$0.00	\$57.42
OPERATING ENGINEERS LOCAL 98	12/01/2017	\$34.48	\$10.79	\$13.02	\$0.00	\$58.29
	06/01/2018	\$35.09	\$10.79	\$13.29	\$0.00	\$59.17
	12/01/2018	\$35.69	\$10.79	\$13.56	\$0.00	\$60.04
	06/01/2019	\$36.20	\$10.79	\$13.83	\$0.00	\$60.82
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2019	\$36.80	\$10.79	\$14.10	\$0.00	\$61.69
BACKHOE/FRONT-END LOADER OPERATOR	06/01/2017	\$33.88	\$10.79	\$12.75	\$0.00	\$57.42
OPERATING ENGINEERS LOCAL 98	12/01/2017	\$34.48	\$10.79	\$13.02	\$0.00	\$58.29
	06/01/2018	\$35.09	\$10.79	\$13.29	\$0.00	\$59.17
	12/01/2018	\$35.69	\$10.79	\$13.56	\$0.00	\$60.04
	06/01/2019	\$36.20	\$10.79	\$13.83	\$0.00	\$60.82
	12/01/2019	\$36.80	\$10.79	\$14.10	\$0.00	\$61.69
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BARCO-TYPE JUMPING TAMPER LABORERS - ZONE 4 (BUILDING & SITE)	12/01/2016	\$25.75	\$7.60	\$11.10	\$0.00	\$44.45
For apprentice rates see "Apprentice- LABORER"						

 Issue Date:
 10/30/2017
 Wage Request Number:
 20171030-036
 Page 2 of 32

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
BATCH/CEMENT PLANT - ON SITE	06/01/2017	\$33.35	\$10.79	\$12.75	\$0.00	\$56.89
OPERATING ENGINEERS LOCAL 98	12/01/2017	\$33.95	\$10.79	\$13.02	\$0.00	\$57.76
	06/01/2018	\$34.56	\$10.79	\$13.29	\$0.00	\$58.64
	12/01/2018	\$35.16	\$10.79	\$13.56	\$0.00	\$59.51
	06/01/2019	\$35.67	\$10.79	\$13.83	\$0.00	\$60.29
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2019	\$36.27	\$10.79	\$14.10	\$0.00	\$61.16
BLOCK PAVER, RAMMER / CURB SETTER LABORERS - ZONE 4 (BUILDING & SITE)	12/01/2016	\$26.25	\$7.60	\$11.10	\$0.00	\$44.95
For apprentice rates see "Apprentice- LABORER"						
BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY)  LABORERS - ZONE 4 (HEAVY & HIGHWAY)  For apprentice rates see "Apprentice- LABORER (Heavy and Highway)	12/01/2016	\$27.17	\$7.60	\$12.45	\$0.00	\$47.22
BOILER MAKER BOILERMAKERS LOCAL 29	01/01/2017	\$42.92	\$6.97	\$16.21	\$0.00	\$66.10

Step	ive Date - 01/01/20 percent		ntice Base Wage	Health	Pension	Supplemental Unemployment	Total Ra	te
1	65		\$27.90	\$6.97	\$10.54	\$0.00	\$45.4	<b>4</b> 1
2	65		\$27.90	\$6.97	\$10.54	\$0.00	\$45.4	<b>4</b> 1
3	70		\$30.04	\$6.97	\$11.35	\$0.00	\$48.3	36
4	75		\$32.19	\$6.97	\$12.16	\$0.00	\$51.3	32
5	80		\$34.34	\$6.97	\$12.97	\$0.00	\$54.2	28
6	85		\$36.48	\$6.97	\$13.78	\$0.00	\$57.2	23
7	90		\$38.63	\$6.97	\$14.59	\$0.00	\$60.	19
8	95		\$40.77	\$6.97	\$15.40	\$0.00	\$63.	14
Notes:	 :							
Appre	entice to Journeywork	er Ratio:1:5						-
	FICIAL MASONRY (	NCL. MASONRY	09/01/2017	\$40.56	\$10.75	\$17.51	\$0.00	\$68.82
ROOFING) RS LOCAL 3 (SF	PRINGFIELD/PITTSFIELD)		03/01/2018	\$41.19	\$10.75	\$17.51	\$0.00	\$69.45
,	,		08/01/2018	\$42.54	\$10.75	\$17.64	\$0.00	\$70.93
			02/01/2019	\$43.09	\$10.75	\$17.64	\$0.00	\$71.48
			08/01/2019	\$44.44	\$10.75	\$17.78	\$0.00	\$72.97
			02/01/2020	\$44.99	\$10.75	\$17.78	\$0.00	\$73.52
			08/01/2020	\$46.34	\$10.75	\$17.93	\$0.00	\$75.02
			02/01/2021	\$46.89	\$10.75	\$17.93	\$0.00	\$75.57
			08/01/2021	\$48.29	\$10.75	\$18.09	\$0.00	\$77.13
			02/01/2022	\$48.82	\$10.75	\$18.09	\$0.00	\$77.66

**Issue Date:** 10/30/2017 **Wage Request Number:** 20171030-036 **Page 3 of 32** 

**Total Rate** 

Apprentice - BRICK/PLASTER/CEMENT MASON - Local 3 Springfield/Pittsfield **Effective Date -**09/01/2017 Supplemental Apprentice Base Wage Health Pension Unemployment Total Rate Step percent 1 50 \$48.54 \$20.28 \$10.75 \$17.51 \$0.00 2 60 \$24.34 \$10.75 \$17.51 \$0.00 \$52.60 3 70 \$28.39 \$10.75 \$17.51 \$0.00 \$56.65 4 80 \$32.45 \$10.75 \$17.51 \$0.00 \$60.71 5 90 \$36.50 \$10.75 \$17.51 \$0.00 \$64.76 **Effective Date -**03/01/2018 Supplemental Apprentice Base Wage Health Unemployment Total Rate Step percent Pension 1 50 \$20.60 \$10.75 \$17.51 \$0.00 \$48.86 2 60 \$10.75 \$17.51 \$0.00 \$24.71 \$52.97 3 70 \$28.83 \$10.75 \$17.51 \$0.00 \$57.09 4 80 \$32.95 \$10.75 \$17.51 \$0.00 \$61.21 5 90 \$0.00 \$37.07 \$10.75 \$17.51 \$65.33 Notes: Apprentice to Journeyworker Ratio:1:5 BULLDOZER/POWER SHOVEL/TREE SHREDDER 06/01/2017 \$10.79 \$12.75 \$0.00 \$57.42 \$33.88 /CLAM SHELLOPERATING \$0.00 12/01/2017 \$34.48 \$10.79 \$13.02 \$58.29 ENGINEERS LOCAL 98 \$13.29 \$0.00 06/01/2018 \$35.09 \$10.79 \$59.17 12/01/2018 \$13.56 \$0.00 \$60.04 \$35.69 \$10.79 \$13.83 \$0.00 06/01/2019 \$36.20 \$10.79 \$60.82 12/01/2019 \$14.10 \$0.00 \$36.80 \$10.79 \$61.69 For apprentice rates see "Apprentice- OPERATING ENGINEERS" CAISSON & UNDERPINNING BOTTOM MAN \$14.35 \$0.00 12/01/2016 \$37.45 \$7.60 \$59.40 LABORERS - FOUNDATION AND MARINE For apprentice rates see "Apprentice- LABORER" CAISSON & UNDERPINNING LABORER 12/01/2016 \$36.30 \$7.60 \$14.35 \$0.00 \$58.25 LABORERS - FOUNDATION AND MARINE For apprentice rates see "Apprentice- LABORER" CAISSON & UNDERPINNING TOP MAN 12/01/2016 \$36.30 \$7.60 \$14.35 \$0.00 \$58.25 LABORERS - FOUNDATION AND MARINE For apprentice rates see "Apprentice- LABORER" CARBIDE CORE DRILL OPERATOR 12/01/2016 \$11.10 \$0.00 \$25.75 \$7.60 \$44.45 LABORERS - ZONE 4 (BUILDING & SITE) For apprentice rates see "Apprentice- LABORER" CARPENTER \$15.00 \$0.00 09/04/2017 \$35.56 \$8.26 \$58.82 CARPENTERS LOCAL 108 - BERKSHIRE COUNTY \$15.00 \$0.00 \$59.82 03/05/2018 \$36.56 \$8.26 09/05/2018 \$15.00 \$0.00 \$60.86 \$37.60 \$8.26

03/04/2019

\$38.64

\$8.26

\$15.00

\$0.00

\$61.90

	Effecti	ive Date -	09/04/2017				Supplemental		
	Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	?
	1	50		\$17.78	\$8.26	\$1.22	\$0.00	\$27.26	Ó
	2	60		\$21.34	\$8.26	\$1.22	\$0.00	\$30.82	2
	3	70		\$24.89	\$8.26	\$11.34	\$0.00	\$44.49	)
	4	75		\$26.67	\$8.26	\$11.34	\$0.00	\$46.27	7
	5	80		\$28.45	\$8.26	\$12.56	\$0.00	\$49.27	7
	6	80		\$28.45	\$8.26	\$12.56	\$0.00	\$49.27	7
	7	90		\$32.00	\$8.26	\$13.78	\$0.00	\$54.04	
	8	90		\$32.00	\$8.26	\$13.78	\$0.00	\$54.04	ļ
	Effecti	ive Date -	03/05/2018				Supplemental		
	Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	•
	1	50		\$18.28	\$8.26	\$1.22	\$0.00	\$27.76	ó
	2	60		\$21.94	\$8.26	\$1.22	\$0.00	\$31.42	2
	3	70		\$25.59	\$8.26	\$11.34	\$0.00	\$45.19	)
	4	75		\$27.42	\$8.26	\$11.34	\$0.00	\$47.02	2
	5	80		\$29.25	\$8.26	\$12.56	\$0.00	\$50.07	7
	6	80		\$29.25	\$8.26	\$12.56	\$0.00	\$50.07	7
	7	90		\$32.90	\$8.26	\$13.78	\$0.00	\$54.94	
	8	90		\$32.90	\$8.26	\$13.78	\$0.00	\$54.94	ļ
	Notes:		/2: 6-8/3:9-11/Steps: 6 mos	(600 hrs)/rates by step					
	Appre	ntice to Jo	urneyworker Ratio:**						
MENT MAS				07/01/2017	\$40.70	\$12.15	\$14.56	\$1.30	\$68.71
CKLAYERS LO	CAL 3 (SP	PRINGFIELD/	PITTSFIELD)	01/01/2018	\$41.34	\$12.15	\$14.56	\$1.30	\$69.35
				07/01/2018	\$42.80	\$12.15	\$14.56	\$1.30	\$70.81
				01/01/2019	\$43.38	\$12.15	\$14.56	\$1.30	\$71.39
				07/01/2019	\$44.85	\$12.15	\$14.56	\$1.30	\$72.86

**Issue Date:** 10/30/2017 **Wage Request Number:** 20171030-036 **Page 5 of 32** 

01/01/2020

\$45.42

\$12.15

\$14.56

\$1.30

\$73.43

Pension

_	Step	e Date - 07/01/2017 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50	\$20.35	\$12.15	\$12.33	\$0.00	\$44.83	
	2	60	\$24.42	\$12.15	\$14.56	\$1.30	\$52.43	
	3	65	\$26.46	\$12.15	\$14.56	\$1.30	\$54.47	
	4	70	\$28.49	\$12.15	\$14.56	\$1.30	\$56.50	
	5	75	\$30.53	\$12.15	\$14.56	\$1.30	\$58.54	
	6	80	\$32.56	\$12.15	\$14.56	\$1.30	\$60.57	
	7	90	\$36.63	\$12.15	\$14.56	\$1.30	\$64.64	
I	Effectiv	e Date - 01/01/2018				Supplemental		
_	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	50	\$20.67	\$12.15	\$12.33	\$0.00	\$45.15	
	2	60	\$24.80	\$12.15	\$14.56	\$1.30	\$52.81	
	3	65	\$26.87	\$12.15	\$14.56	\$1.30	\$54.88	
	4	70	\$28.94	\$12.15	\$14.56	\$1.30	\$56.95	
	5	75	\$31.01	\$12.15	\$14.56	\$1.30	\$59.02	
	6	80	\$33.07	\$12.15	\$14.56	\$1.30	\$61.08	
	7	90	\$37.21	\$12.15	\$14.56	\$1.30	\$65.22	
-  1 	Notes:	Steps 3,4 are 500 hrs. All other	r steps are 1,000 hrs.					
L.	Appren	tice to Journeyworker Ratio:	1:3					
AIN SAW OP ORERS - ZONE 4			12/01/201	6 \$25.75	\$7.60	\$11.10	\$0.00	\$44.45
For apprentice ra	ites see "A	pprentice- LABORER"						
MPRESSOR (			06/01/201	7 \$33.35	\$10.79	\$12.75	\$0.00	\$56.89
RATING ENGINE	EEKS LO	AL 98	12/01/201	7 \$33.95	\$10.79	\$13.02	\$0.00	\$57.76
			06/01/201	8 \$34.56	\$10.79	\$13.29	\$0.00	\$58.64
			12/01/201	8 \$35.16	\$10.79	\$13.56	\$0.00	\$59.51
			06/01/201	9 \$35.67	\$10.79	\$13.83	\$0.00	\$60.29
			12/01/201	9 \$36.27	\$10.79	\$14.10	\$0.00	\$61.16
		pprentice- OPERATING ENGINEER						*
ANE OPERA	TOR	· ·	06/01/201	7 \$37.38	\$10.79	\$12.75	\$0.00	\$60.92
ANE OPERA	TOR	· ·	06/01/201 <sup>-</sup> 12/01/201 <sup>-</sup>	7 \$37.98	\$10.79	\$13.02	\$0.00	\$61.79
ANE OPERA	TOR	· ·	06/01/201	7 \$37.98	\$10.79	\$13.02 \$13.29	\$0.00 \$0.00	\$61.79 \$62.67
ANE OPERA	TOR	· ·	06/01/201 <sup>-</sup> 12/01/201 <sup>-</sup>	7 \$37.98 8 \$38.59	\$10.79 \$10.79	\$13.02 \$13.29 \$13.56	\$0.00 \$0.00 \$0.00	\$61.79
ANE OPERA	TOR	· ·	06/01/201 12/01/201 06/01/201	7 \$37.98 8 \$38.59 8 \$39.19	\$10.79 \$10.79 \$10.79	\$13.02 \$13.29 \$13.56 \$13.83	\$0.00 \$0.00 \$0.00 \$0.00	\$61.79 \$62.67
ANE OPERA' ERATING ENGINE	TOR EERS LO	· ·	06/01/201 12/01/201 06/01/201 12/01/201 12/01/201	7 \$37.98 8 \$38.59 8 \$39.19 9 \$39.70	\$10.79 \$10.79 \$10.79 \$10.79	\$13.02 \$13.29 \$13.56	\$0.00 \$0.00 \$0.00	\$61.79 \$62.67 \$63.54

	Step	ive Date - 01/01/2017 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	e
	1	50	\$25.71	\$7.85	\$0.00	\$0.00	\$33.50	6
	2	55	\$28.28	\$7.85	\$3.66	\$0.00	\$39.79	9
	3	60	\$30.85	\$7.85	\$3.99	\$0.00	\$42.69	9
	4	65	\$33.42	\$7.85	\$4.32	\$0.00	\$45.59	9
	5	70	\$35.99	\$7.85	\$14.11	\$0.00	\$57.93	5
	6	75	\$38.56	\$7.85	\$14.44	\$0.00	\$60.83	5
	7	80	\$41.13	\$7.85	\$14.77	\$0.00	\$63.75	5
	8	90	\$46.27	\$7.85	\$15.44	\$0.00	\$69.50	6
	Notes:							
		Steps are 750 hrs.					İ	
		entice to Journeyworker Ratio:1:1						
EMO: ADZEN BORERS - ZONE		DING & SITE)	06/01/2017	\$37.00	\$7.60	\$14.65	\$0.00	\$59.25
	, (=		12/01/2017	\$37.85	\$7.60	\$14.65	\$0.00	\$60.10
			06/01/2018	\$38.80	\$7.60	\$14.65	\$0.00	\$61.05
			12/01/2018	\$39.75	\$7.60	\$14.65	\$0.00	\$62.00
			06/01/2019	\$40.75	\$7.60	\$14.65	\$0.00	\$63.00
For apprentice	rates see	"Apprentice- LABORER"	12/01/2019	\$41.75	\$7.60	\$14.65	\$0.00	\$64.00
		OADER/HAMMER OPERATOR	06/01/2017	\$38.00	\$7.60	\$14.65	\$0.00	\$60.25
IBORERS - ZONE	L 4 (BUILI	DING & SITE)	12/01/2017	\$38.85	\$7.60	\$14.65	\$0.00	\$61.10
			06/01/2018	\$39.80	\$7.60	\$14.65	\$0.00	\$62.05
			12/01/2018	\$40.75	\$7.60	\$14.65	\$0.00	\$63.00
			06/01/2019	\$41.75	\$7.60	\$14.65	\$0.00	\$64.00
For apprentice	rates see	"Apprentice- LABORER"	12/01/2019	\$42.75	\$7.60	\$14.65	\$0.00	\$65.00
EMO: BURNI	ERS		06/01/2017	\$37.75	\$7.60	\$14.65	\$0.00	\$60.00
ABORERS - ZONE	e 4 (BUIL	DING & SITE)	12/01/2017	\$38.60	\$7.60	\$14.65	\$0.00	\$60.85
			06/01/2018	\$39.55	\$7.60	\$14.65	\$0.00	\$61.80
			12/01/2018	\$40.50	\$7.60	\$14.65	\$0.00	\$62.75
			06/01/2019	\$41.50	\$7.60	\$14.65	\$0.00	\$63.75
			12/01/2019	\$42.50	\$7.60	\$14.65	\$0.00	\$64.75
		"Apprentice- LABORER"						
EMO: CONCI IBORERS - ZONE		CUTTER/SAWYER DING & SITE)	06/01/2017			\$14.65	\$0.00	\$60.25
	, , , , , ,	,	12/01/2017			\$14.65	\$0.00	\$61.10
			06/01/2018			\$14.65	\$0.00	\$62.05
			12/01/2018			\$14.65	\$0.00	\$63.00
			06/01/2019	\$41.75	\$7.60	\$14.65	\$0.00	\$64.00
			12/01/2019	\$42.75	\$7.60	\$14.65	\$0.00	\$65.00

12/01/2017   \$38.60   \$7.60   \$14.65   \$0.00   \$60.85     12/01/2018   \$39.55   \$7.60   \$14.65   \$0.00   \$61.80     12/01/2018   \$40.50   \$7.60   \$14.65   \$0.00   \$62.75     12/01/2019   \$41.50   \$7.60   \$14.65   \$0.00   \$63.75     12/01/2019   \$42.50   \$7.60   \$14.65   \$0.00   \$63.75     12/01/2019   \$42.50   \$7.60   \$14.65   \$0.00   \$63.75     12/01/2019   \$42.50   \$7.60   \$14.65   \$0.00   \$64.75     12/01/2019   \$42.50   \$7.60   \$14.65   \$0.00   \$64.75     12/01/2017   \$37.00   \$7.60   \$14.65   \$0.00   \$64.75     12/01/2017   \$37.85   \$7.60   \$14.65   \$0.00   \$60.10     12/01/2018   \$38.80   \$7.60   \$14.65   \$0.00   \$60.10     12/01/2018   \$38.80   \$7.60   \$14.65   \$0.00   \$60.10     12/01/2018   \$39.75   \$7.60   \$14.65   \$0.00   \$61.05     12/01/2019   \$40.75   \$7.60   \$14.65   \$0.00   \$62.00     12/01/2019   \$40.75   \$7.60   \$14.65   \$0.00   \$63.00     12/01/2019   \$41.75   \$7.60   \$14.65   \$0.00   \$63.00     12/01/2019   \$	Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
12/01/2017   \$38.60   \$7.60   \$14.65   \$0.00   \$60.85     16/01/2018   \$34.50   \$7.60   \$14.65   \$0.00   \$62.75     16/01/2018   \$34.50   \$7.60   \$14.65   \$0.00   \$62.75     16/01/2019   \$41.50   \$7.60   \$14.65   \$0.00   \$62.75     16/01/2019   \$41.50   \$7.60   \$14.65   \$0.00   \$63.75     16/01/2019   \$42.50   \$7.60   \$14.65   \$0.00   \$64.75     16/01/2019   \$42.50   \$7.60   \$14.65   \$0.00   \$64.75     16/01/2017   \$37.00   \$7.60   \$14.65   \$0.00   \$64.75     16/01/2017   \$37.85   \$7.60   \$14.65   \$0.00   \$60.10     16/01/2018   \$33.80   \$7.60   \$14.65   \$0.00   \$60.10     16/01/2018   \$33.80   \$7.60   \$14.65   \$0.00   \$60.10     16/01/2018   \$33.80   \$7.60   \$14.65   \$0.00   \$62.00     16/01/2018   \$33.75   \$7.60   \$14.65   \$0.00   \$62.00     16/01/2019   \$40.75   \$7.60   \$14.65   \$0.00   \$62.00     16/01/2019   \$40.75   \$7.60   \$14.65   \$0.00   \$63.00     16/01/2019   \$40.75   \$7.60   \$14.65   \$0.00   \$63.00     16/01/2019   \$40.75   \$7.60   \$14.65   \$0.00   \$63.00     16/01/2019   \$40.75   \$7.60   \$14.65   \$0.00   \$63.00     16/01/2019   \$40.75   \$7.60   \$14.65   \$0.00   \$63.00     16/01/2019   \$40.75   \$7.60   \$14.65   \$0.00   \$63.00     16/01/2019   \$40.75   \$7.60   \$14.65   \$0.00   \$63.00     16/01/2019   \$40.75   \$7.60   \$14.65   \$0.00   \$63.00     16/01/2018   \$40.75   \$7.60   \$14.65   \$0.00   \$63.00     16/01/2018   \$40.75   \$7.60   \$14.65   \$0.00   \$63.00     16/01/2018   \$40.75   \$7.60   \$14.65   \$0.00   \$60.00     16/01/2018   \$40.75   \$7.60   \$14.65   \$0.00   \$60.00     16/01/2018   \$40.75   \$7.60   \$14.65   \$0.00   \$60.00     16/01/2018   \$40.75   \$9.80   \$18.17   \$0.00   \$92.62     16/01/2018   \$40.75   \$9.80   \$18.17   \$0.00   \$92.62     16/01/2018   \$40.75   \$9.80   \$18.17   \$0.00   \$92.62     16/01/2018   \$40.75   \$9.80   \$18.17   \$0.00   \$92.62     16/01/2018   \$40.75   \$9.80   \$18.17   \$0.00   \$92.62     16/01/2018   \$40.75   \$9.80   \$18.17   \$0.00   \$92.62     16/01/2018   \$40.75   \$9.80   \$18.17   \$0.00   \$92.62     16/01/2018   \$40.75   \$9.80   \$18.17   \$0.00   \$92.62     16/01/2018   \$	DEMO: JACKHAMMER OPERATOR	06/01/2017	\$37.75	\$7.60	\$14.65	\$0.00	\$60.00
12/01/2018   \$40.50   \$7.60   \$14.65   \$0.00   \$62.75     60/01/2019   \$41.50   \$7.60   \$14.65   \$0.00   \$63.75     12/01/2019   \$42.50   \$7.60   \$14.65   \$0.00   \$64.75     12/01/2019   \$42.50   \$7.60   \$14.65   \$0.00   \$64.75     12/01/2019   \$42.50   \$7.60   \$14.65   \$0.00   \$64.75     DEMO: WRECKING LABORER   \$0.60/1/2017   \$37.00   \$7.60   \$14.65   \$0.00   \$59.25     12/01/2017   \$37.85   \$7.60   \$14.65   \$0.00   \$50.05     12/01/2018   \$38.80   \$7.60   \$14.65   \$0.00   \$61.05     12/01/2018   \$38.75   \$7.60   \$14.65   \$0.00   \$62.00     12/01/2019   \$40.75   \$7.60   \$14.65   \$0.00   \$62.00     12/01/2019   \$40.75   \$7.60   \$14.65   \$0.00   \$63.00     12/01/2019   \$41.75   \$7.60   \$14.65   \$0.00   \$63.00     POR apprentice rates see "Apprentice- LABORER"   \$0.801/2015   \$60.34   \$9.80   \$18.17   \$0.00   \$88.31     PUED DRIVER LOCAL 56 (ZONE 3)   \$0.801/2015   \$43.10   \$9.80   \$18.17   \$0.00   \$92.62     PUED DRIVER LOCAL 56 (ZONE 3)   \$0.801/2015   \$43.10   \$9.80   \$18.17   \$0.00   \$92.62     PUED DRIVER LOCAL 56 (ZONE 3)   \$0.801/2015   \$64.65   \$9.80   \$18.17   \$0.00   \$92.62     PUED DRIVER LOCAL 56 (ZONE 3)   \$0.801/2015   \$90.51   \$9.80   \$18.17   \$0.00   \$92.62     PUED DRIVER LOCAL 56 (ZONE 3)   \$0.801/2015   \$90.51   \$9.80   \$18.17   \$0.00   \$92.62     PUED DRIVER LOCAL 56 (ZONE 3)   \$0.801/2015   \$90.51   \$9.80   \$18.17   \$0.00   \$92.62     PUED DRIVER LOCAL 56 (ZONE 3)   \$0.801/2015   \$90.51   \$9.80   \$18.17   \$0.00   \$92.62     PUED DRIVER LOCAL 56 (ZONE 3)   \$0.801/2015   \$90.51   \$9.80   \$18.17   \$0.00   \$92.62     PUED DRIVER LOCAL 56 (ZONE 3)   \$90.801/2015   \$90.51   \$90.80   \$18.17   \$0.00   \$90.801/2015	LABORERS - ZONE 4 (BUILDING & SITE)	12/01/2017	\$38.60	\$7.60	\$14.65	\$0.00	\$60.85
		06/01/2018	\$39.55	\$7.60	\$14.65	\$0.00	\$61.80
12/01/2019   \$42.50   \$7.60   \$14.65   \$0.00   \$64.75		12/01/2018	\$40.50	\$7.60	\$14.65	\$0.00	\$62.75
DEMO: WRECKING LABORER   06/01/2017   \$37.00   \$7.60   \$14.65   \$0.00   \$59.25   \$2.50   \$2.		06/01/2019	\$41.50	\$7.60	\$14.65	\$0.00	\$63.75
DEMO: WRECKING LABORER	D. C. LANCOSTINI	12/01/2019	\$42.50	\$7.60	\$14.65	\$0.00	\$64.75
12/01/2017   \$37.85   \$7.60   \$14.65   \$0.00   \$60.10     16/01/2018   \$38.80   \$7.60   \$14.65   \$0.00   \$60.10     16/01/2018   \$38.80   \$7.60   \$14.65   \$0.00   \$62.00     16/01/2018   \$39.75   \$7.60   \$14.65   \$0.00   \$62.00     16/01/2019   \$40.75   \$7.60   \$14.65   \$0.00   \$63.00     12/01/2019   \$41.75   \$7.60   \$14.65   \$0.00   \$63.00     12/01/2019   \$41.75   \$7.60   \$14.65   \$0.00   \$64.00     For apprentice rates see "Apprentice-LABORER"      DIVER   08/01/2015   \$60.34   \$9.80   \$18.17   \$0.00   \$88.31      PILE DRIVER LOCAL 56 (ZONE 3)     For apprentice rates see "Apprentice-PILE DRIVER"      DIVER TENDER   08/01/2015   \$43.10   \$9.80   \$18.17   \$0.00   \$71.07      PILE DRIVER LOCAL 56 (ZONE 3)     For apprentice rates see "Apprentice-PILE DRIVER"      DIVER TENDER (EFFLUENT)   08/01/2015   \$64.65   \$9.80   \$18.17   \$0.00   \$92.62      DIVER TENDER (EFFLUENT)   08/01/2015   \$90.51   \$9.80   \$18.17   \$0.00   \$92.62      DIVER TENDER (EFFLUENT)   08/01/2015   \$90.51   \$9.80   \$18.17   \$0.00   \$92.62      DIVER/SLURRY (EFFLUENT)   08/01/2015   \$90.51   \$9.80   \$18.17   \$0.00   \$11.848      DIVER/SLURRY (EFFLUENT)   \$0.00   \$11.20   \$0.00   \$60.81      ELECTRICIAN (Including Core Drilling)   07/02/2017   \$40.51   \$10.00   \$11.42   \$0.00   \$61.93      O7/01/2018   \$41.21   \$10.25   \$11.74   \$0.00   \$63.20      O7/01/2018   \$41.91   \$10.50   \$12.06   \$0.00   \$63.20      O7/01/2018   \$41.91   \$10.50   \$12.06   \$0.00   \$64.47      O6/30/2019   \$42.66   \$10.75   \$12.33   \$0.00   \$65.74      O6/30/2019   \$42.66   \$10.75   \$12.33   \$0.00   \$65.74      O7/01/2018   \$41.91   \$10.50   \$12.05   \$10.00   \$65.74      O7/01/2018   \$41.91   \$10.90   \$10.25   \$10.75      O7/01/2018   \$41.91   \$10.90   \$10.25   \$10.75		06/01/2017	\$27.00	¢7.60	¢1465	\$0.00	\$50.25
	LABORERS - ZONE 4 (BUILDING & SITE)						
12/01/2018   \$39.75   \$7.60   \$14.65   \$0.00   \$62.00     16/01/2019   \$40.75   \$7.60   \$14.65   \$0.00   \$63.00     12/01/2019   \$41.75   \$7.60   \$14.65   \$0.00   \$63.00     12/01/2019   \$41.75   \$7.60   \$14.65   \$0.00   \$64.00     For apprentice rates see "Apprentice-LABORER"							
No.							
12/01/2019   \$41.75   \$7.60   \$14.65   \$0.00   \$64.00				*			
For apprentice rates see "Apprentice-LABORER"   08/01/2015   \$60.34   \$9.80   \$18.17   \$0.00   \$88.31							
### PILE DRIVER LOCAL 56 (ZONE 3)  For apprentice rates see "Apprentice-PILE DRIVER"  DIVER TENDER PILE DRIVER LOCAL 56 (ZONE 3)  For apprentice rates see "Apprentice-PILE DRIVER"  DIVER TENDER (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 3)  For apprentice rates see "Apprentice-PILE DRIVER"  DIVER TENDER (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 3)  For apprentice rates see "Apprentice-PILE DRIVER"  DIVER/SLURRY (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 3)  For apprentice rates see "Apprentice-PILE DRIVER"  DIVER/SLURRY (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 3)  For apprentice rates see "Apprentice-PILE DRIVER"  ELECTRICIAN (Including Core Drilling)  O7/02/2017 \$40.01 \$9.60 \$11.20 \$0.00 \$60.81 \$11.20 \$0.00 \$61.93 \$0.00 \$61.93 \$0.00 \$61.93 \$0.00 \$61.93 \$0.00 \$63.20 \$12/30/2018 \$41.21 \$10.25 \$11.74 \$0.00 \$63.20 \$62.74 \$12/30/2018 \$41.91 \$10.50 \$12.33 \$0.00 \$65.74	For apprentice rates see "Apprentice- LABORER"	12/01/2019	\$41.75	\$7.60	\$14.03	\$0.00	\$64.00
DIVER TENDER PILE DRIVER LOCAL 56 (ZONE 3) For apprentice rates see "Apprentice- PILE DRIVER"  DIVER TENDER (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 3) For apprentice rates see "Apprentice- PILE DRIVER"  DIVER SLURRY (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 3) For apprentice rates see "Apprentice- PILE DRIVER"  DIVER/SLURRY (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 3) For apprentice rates see "Apprentice- PILE DRIVER"  ELECTRICIAN (Including Core Drilling) PILE DRIVER LOCAL 7  12/31/2017 \$40.01 \$9.60 \$11.20 \$0.00 \$60.81 \$61.93 \$61.	DIVER PILE DRIVER LOCAL 56 (ZONE 3)	08/01/2015	\$60.34	\$9.80	\$18.17	\$0.00	\$88.31
### PILE DRIVER LOCAL 56 (ZONE 3)  For apprentice rates see "Apprentice- PILE DRIVER"  DIVER TENDER (EFFLUENT)  For apprentice rates see "Apprentice- PILE DRIVER"  DIVER/SLURRY (EFFLUENT)  PILE DRIVER LOCAL 56 (ZONE 3)  For apprentice rates see "Apprentice- PILE DRIVER"  DIVER/SLURRY (EFFLUENT)  PILE DRIVER LOCAL 56 (ZONE 3)  For apprentice rates see "Apprentice- PILE DRIVER"  ELECTRICIAN (Including Core Drilling)  #### DRIVER LOCAL 7    12/31/2017	For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 3) For apprentice rates see "Apprentice-PILE DRIVER"  DIVER/SLURRY (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 3) For apprentice rates see "Apprentice-PILE DRIVER"  ELECTRICIAN (Including Core Drilling) ELECTRICIANS LOCAL 7  12/31/2017 \$40.51 \$10.00 \$11.42 \$0.00 \$61.93  07/01/2018 \$41.21 \$10.25 \$11.74 \$0.00 \$63.20  12/30/2018 \$41.91 \$10.50 \$12.06 \$0.00 \$64.47  06/30/2019 \$42.66 \$10.75 \$12.33 \$0.00 \$65.74	DIVER TENDER PILE DRIVER LOCAL 56 (ZONE 3)	08/01/2015	\$43.10	\$9.80	\$18.17	\$0.00	\$71.07
PILE DRIVER LOCAL 56 (ZONE 3)  For apprentice rates see "Apprentice- PILE DRIVER"  DIVER/SLURRY (EFFLUENT)  PILE DRIVER LOCAL 56 (ZONE 3)  For apprentice rates see "Apprentice- PILE DRIVER"  ELECTRICIAN (Including Core Drilling)  ELECTRICIANS LOCAL 7  12/31/2017 \$40.01 \$9.60 \$11.20 \$0.00 \$60.81  23/30/2018 \$41.21 \$10.25 \$11.74 \$0.00 \$63.20  12/30/2018 \$41.91 \$10.50 \$12.06 \$0.00 \$64.47  06/30/2019 \$42.66 \$10.75 \$12.33 \$0.00 \$65.74	For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER/SLURRY (EFFLUENT)  PILE DRIVER LOCAL 56 (ZONE 3)  For apprentice rates see "Apprentice- PILE DRIVER"  ELECTRICIAN (Including Core Drilling)  ELECTRICIANS LOCAL 7  08/01/2015  \$90.51  \$90.51  \$90.51  \$90.51  \$90.51  \$90.50  \$118.48   07/02/2017  \$40.01  \$90.60  \$11.20  \$0.00  \$60.81  12/31/2017  \$40.51  \$10.00  \$11.42  \$0.00  \$61.93  07/01/2018  \$41.21  \$10.25  \$11.74  \$0.00  \$63.20  12/30/2018  \$41.91  \$10.50  \$12.33  \$0.00  \$64.47  06/30/2019  \$42.66  \$10.75  \$12.33  \$0.00  \$65.74	DIVER TENDER (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 3)	08/01/2015	\$64.65	\$9.80	\$18.17	\$0.00	\$92.62
PILE DRIVER LOCAL 56 (ZONE 3)  For apprentice rates see "Apprentice- PILE DRIVER"  ELECTRICIAN (Including Core Drilling)  ELECTRICIANS LOCAL 7  07/02/2017 \$40.01 \$9.60 \$11.20 \$0.00 \$60.81  12/31/2017 \$40.51 \$10.00 \$11.42 \$0.00 \$61.93  07/01/2018 \$41.21 \$10.25 \$11.74 \$0.00 \$63.20  12/30/2018 \$41.91 \$10.50 \$12.06 \$0.00 \$64.47  06/30/2019 \$42.66 \$10.75 \$12.33 \$0.00 \$65.74	For apprentice rates see "Apprentice- PILE DRIVER"						
ELECTRICIAN (Including Core Drilling)  07/02/2017 \$40.01 \$9.60 \$11.20 \$0.00 \$60.81  12/31/2017 \$40.51 \$10.00 \$11.42 \$0.00 \$61.93  07/01/2018 \$41.21 \$10.25 \$11.74 \$0.00 \$63.20  12/30/2018 \$41.91 \$10.50 \$12.06 \$0.00 \$64.47  06/30/2019 \$42.66 \$10.75 \$12.33 \$0.00 \$65.74	,	08/01/2015	\$90.51	\$9.80	\$18.17	\$0.00	\$118.48
12/31/2017 \$40.51 \$10.00 \$11.42 \$0.00 \$61.93 07/01/2018 \$41.21 \$10.25 \$11.74 \$0.00 \$63.20 12/30/2018 \$41.91 \$10.50 \$12.06 \$0.00 \$64.47 06/30/2019 \$42.66 \$10.75 \$12.33 \$0.00 \$65.74	For apprentice rates see "Apprentice- PILE DRIVER"						
12/31/2017       \$40.51       \$10.00       \$11.42       \$0.00       \$61.93         07/01/2018       \$41.21       \$10.25       \$11.74       \$0.00       \$63.20         12/30/2018       \$41.91       \$10.50       \$12.06       \$0.00       \$64.47         06/30/2019       \$42.66       \$10.75       \$12.33       \$0.00       \$65.74		07/02/2017	\$40.01	\$9.60	\$11.20	\$0.00	\$60.81
12/30/2018       \$41.91       \$10.50       \$12.06       \$0.00       \$64.47         06/30/2019       \$42.66       \$10.75       \$12.33       \$0.00       \$65.74	ELECTRICIANS LOCAL 7	12/31/2017	\$40.51	\$10.00	\$11.42	\$0.00	\$61.93
06/30/2019 \$42.66 \$10.75 \$12.33 \$0.00 \$65.74		07/01/2018	\$41.21	\$10.25	\$11.74	\$0.00	\$63.20
		12/30/2018	\$41.91	\$10.50	\$12.06	\$0.00	\$64.47
12/29/2019 \$43.41 \$11.00 \$12.60 \$0.00 \$67.01		06/30/2019	\$42.66	\$10.75	\$12.33	\$0.00	\$65.74
		12/29/2019	\$43.41	\$11.00	\$12.60	\$0.00	\$67.01

 Issue Date:
 10/30/2017
 Wage Request Number:
 20171030-036
 Page 8 of 32

Supplemental Unemployment

ELEVATOR CONSTRUCTORS LOCAL 41

FENCE & BEAM RAIL ERECTOR

For apprentice rates see "Apprentice- LABORER"

LABORERS - ZONE 4 (BUILDING & SITE)

For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"

Step	ive Date -	07/02/2017	pprentice Base Wage	Haalth	Pension	Supplemental Unemployment	Total Rate	
1 step	percent							
	40		\$16.00	\$5.25	\$0.48	\$0.00	\$21.73	
2	45		\$18.00	\$5.25	\$0.54	\$0.00	\$23.79	
3	50		\$20.01	\$9.60	\$6.90	\$0.00	\$36.51	
4	55		\$22.01	\$9.60	\$6.96	\$0.00	\$38.57	
5	65		\$26.01	\$9.60	\$8.08	\$0.00	\$43.69	
6	70		\$28.01	\$9.60	\$9.14	\$0.00	\$46.75	
Effecti Step	ive Date -	12/31/2017	pprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	40		\$16.20	\$5.40	\$0.49	\$0.00	\$22.09	
2	45		\$18.23	\$5.40	\$0.55	\$0.00	\$24.18	
3	50		\$20.26	\$10.00	\$6.91	\$0.00	\$37.17	
4	55		\$22.28	\$10.00	\$6.97	\$0.00	\$39.25	
5	65		\$26.33	\$10.00	\$8.09	\$0.00	\$44.42	
6	70		\$28.36	\$10.00	\$9.15	\$0.00	\$47.51	
Notes:								
		are 1000 hrs; Steps 3-6 are 15	00 hrs.					
Appre	entice to Io	urneyworker Ratio:2:3****						
• •	ntice to so	·						
R CONSTR	UCTOR		01/01/2017	7 \$49.90	\$15.28	\$15.71	\$0.00	\$8
Appre	UCTOR RS LOCAL 41	LEVATOR CONSTRUCTOR - 1 01/01/2017 A			\$15.28 Pension	\$15.71  Supplemental Unemployment	\$0.00 Total Rate	
Appre	UCTOR RS LOCAL 41  ntice - Exits ive Date -	01/01/2017	Local 41			Supplemental		
Appre Effecti Step	NCTOR AS LOCAL 41  ntice - Exive Date - percent	01/01/2017	Local 41 pprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
Appre Effecti Step  1	ntice - Entire Date - percent	01/01/2017	Local 41  pprentice Base Wage \$24.95	Health \$15.28	Pension \$15.71	Supplemental Unemployment \$0.00	Total Rate \$55.94	
Appre Effecti Step 1 2	ntice - Exive Date - percent 50 55	01/01/2017	Local 41  pprentice Base Wage \$24.95 \$27.45	Health \$15.28 \$15.28	Pension \$15.71 \$15.71	Supplemental Unemployment \$0.00 \$0.00	Total Rate \$55.94 \$58.44	
Appre Effects Step 1 2 3	ntice - Experience	01/01/2017	Local 41  pprentice Base Wage \$24.95 \$27.45 \$32.44	Health \$15.28 \$15.28 \$15.28	Pension \$15.71 \$15.71 \$15.71	Supplemental Unemployment \$0.00 \$0.00 \$0.00	Total Rate \$55.94 \$58.44 \$63.43	
Appre Effecti Step 1 2 3 4	ntice - Exive Date - percent 50 55 65 70 80	01/01/2017	\$24.95 \$27.45 \$32.44 \$34.93 \$39.92	Health \$15.28 \$15.28 \$15.28 \$15.28	Pension \$15.71 \$15.71 \$15.71 \$15.71	Supplemental Unemployment \$0.00 \$0.00 \$0.00 \$0.00	Total Rate \$55.94 \$58.44 \$63.43 \$65.92	

12/01/2016

\$25.75

\$11.10

\$7.60

\$0.00

\$44.45

FIELD ENG.INST/ROD-BLDG,SITE,HVY/HWY  OPERATING ENGINEERS LOCAL 98  FIELD ENG.SURVEY CHIEF-BLDG,SITE,HVY/HWY  OPERATING ENGINEERS LOCAL 98  FIELD ENG.SURVEY CHIEF-BLDG,SITE,HVY/HWY  OPERATING ENGINEERS LOCAL 98  FIELD ENG.SURVEY CHIEF-BLDG,SITE,HVY/HWY  OF A 18.84 St. 10 St.	Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FIELD ENG.INST/ROD-BLDG,SITE,HVY/HWY OFERATING ENGINEERS LOCAL 98  FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY OFERATING ENGINEERS LOCAL 98  FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY OFERATING ENGINEERS LOCAL 98  FIELD ENG.SURVEY CHIEF-BLDG,SITE,HVY/HWY OFERATING ENGINEERS LOCAL 98  FIELD ENG.SURVEY CHIEF-BLDG,SITE,HVY/HWY OFERATING ENGINEERS LOCAL 98  FIELD ENG.SURVEY CHIEF-BLDG,SITE,HVY/HWY OFERATING ENGINEERS LOCAL 98  OFTICAL AND INSTALLER OT/102/2017 \$40.01 \$9.60 \$11.20 \$0.00 \$60.81  ELECTRICIANS LOCAL 7  12/31/2017 \$40.51 \$10.00 \$11.42 \$0.00 \$61.93  OT/101/2018 \$41.21 \$10.25 \$11.74 \$0.00 \$63.20  12/30/2018 \$41.91 \$10.50 \$12.06 \$0.00 \$64.47  OFFICE ALARM REPAIR / MAINTENANCE OFF	FENCE & GUARD RAIL ERECTOR (HEAVY & HIGHWAY)  LABORERS - ZONE 4 (HEAVY & HIGHWAY)	12/01/2016	\$26.67	\$7.60	\$12.45	\$0.00	\$46.72
FIELD ENG-PARTY CHIEF-BLDG,SITE,HVY/HWY OPERATING ENGINEERS LOCAL 98  FIELD ENG-PARTY CHIEF-BLDG,SITE,HVY/HWY OF MILES AND SELECTRICIANS  OF MAINTENANCE FOR apprentice rates see "Apprentice-ELECTRICIANS"  FOR apprentice rates see "Apprentice-TELECOMMUNICATIONS TECHNICIANS"  FOR apprentice rates see "Apprentice-TELECOMMUNICATIONS TECHNICIANS"  FOR apprentice rates see "Apprentice-TELECOMMUNICATIONS TECHNICIANS"  FOR ADDRESS AND SELECT SELECTRICIANS SELECTRICIAN	For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
FIELD ENG SURVEY CHIEF-BLDG,SITE,HVY/HWY  06/01/1999 \$22.33 \$4.80 \$4.10 \$0.00 \$31.23  Security Chief-BLDG,SITE,HVY/HWY  06/01/1999 \$22.33 \$4.80 \$4.10 \$0.00 \$60.81  \$2.31.23  \$3.32  \$4.80 \$4.10 \$0.00 \$60.81  \$4.10 \$0.00 \$60.81  \$4.21 \$1.231/2017 \$40.51 \$10.00 \$11.42 \$0.00 \$61.93 \$61.93  \$67/01/2018 \$41.21 \$10.25 \$11.74 \$0.00 \$63.20 \$64.47 \$6/30/2019 \$42.66 \$10.75 \$12.33 \$0.00 \$67.01  For apprentice rates see "Apprentice-ELECTRICIAN"  FIRE ALARM REPAIR / MAINTENANCE \$12/31/2017 \$40.51 \$12/31/2017 \$40.51 \$10.00 \$11.20 \$0.00 \$67.01  \$60.81  \$67.01  \$60.81		06/01/1999	\$18.84	\$4.80	\$4.10	\$0.00	\$27.74
FIRE ALARM INSTALLER    07/02/2017   \$40.01   \$9.60   \$11.20   \$0.00   \$60.81     12/31/2017   \$40.51   \$10.00   \$11.42   \$0.00   \$63.20     12/30/2018   \$41.21   \$10.25   \$11.74   \$0.00   \$63.20     12/30/2018   \$41.91   \$10.50   \$12.06   \$0.00   \$64.47     12/29/2019   \$43.41   \$11.00   \$12.60   \$0.00   \$67.01     For apprentice rates see "Apprentice- ELECTRICIAN"    Fire Alarm Repair / Maintenance / Commissioning electricians / Commissioning electricians / 12/30/2018   \$41.21   \$10.25   \$11.74   \$0.00   \$66.81     12/30/2019   \$43.41   \$11.00   \$12.60   \$0.00   \$67.01     Fire Alarm Repair / Maintenance / Commissioning electricians / 12/31/2017   \$40.01   \$9.60   \$11.20   \$0.00   \$60.81     12/30/2018   \$41.21   \$10.25   \$11.74   \$0.00   \$61.93     12/30/2018   \$41.21   \$10.25   \$11.74   \$0.00   \$63.20     12/30/2018   \$41.21   \$10.25   \$11.74   \$0.00   \$63.20     12/30/2018   \$41.21   \$10.25   \$11.74   \$0.00   \$63.20     12/30/2018   \$41.91   \$10.50   \$12.06   \$0.00   \$64.47     06/30/2019   \$42.66   \$10.75   \$12.33   \$0.00   \$65.74     12/29/2019   \$43.41   \$11.00   \$12.60   \$0.00   \$67.01     For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"    FIREMAN		06/01/1999	\$21.33	\$4.80	\$4.10	\$0.00	\$30.23
12/31/2017   \$40.51   \$10.00   \$11.42   \$0.00   \$61.93	FIELD ENG.SURVEY CHIEF-BLDG,SITE,HVY/HWY OPERATING ENGINEERS LOCAL 98	06/01/1999	\$22.33	\$4.80	\$4.10	\$0.00	\$31.23
12/31/2017   \$40.51   \$10.00   \$11.42   \$0.00   \$61.93	FIRE ALARM INSTALLER	07/02/2017	\$40.01	\$9.60	\$11.20	\$0.00	\$60.81
12/30/2018   \$41.91   \$10.50   \$12.06   \$0.00   \$64.47	ELECTRICIANS LOCAL 7	12/31/2017	\$40.51	\$10.00	\$11.42	\$0.00	\$61.93
06/30/2019   \$42.66   \$10.75   \$12.33   \$0.00   \$65.74     12/29/2019   \$43.41   \$11.00   \$12.60   \$0.00   \$67.01     For apprentice rates see "Apprentice-ELECTRICIAN"		07/01/2018	\$41.21	\$10.25	\$11.74	\$0.00	\$63.20
12/29/2019   \$43.41   \$11.00   \$12.60   \$0.00   \$67.01		12/30/2018	\$41.91	\$10.50	\$12.06	\$0.00	\$64.47
FIRE ALARM REPAIR / MAINTENANCE / COMMISSIONINGELECTRICIANS   12/31/2017   \$40.01   \$9.60   \$11.20   \$0.00   \$60.81		06/30/2019	\$42.66	\$10.75	\$12.33	\$0.00	\$65.74
FIRE ALARM REPAIR / MAINTENANCE / COMMISSIONINGELECTRICIANS   12/31/2017   \$40.01   \$9.60   \$11.20   \$0.00   \$60.81		12/29/2019	\$43.41	\$11.00	\$12.60	\$0.00	\$67.01
/ COMMISSIONINGELECTRICIANS  12/31/2017 \$40.51 \$10.00 \$11.42 \$0.00 \$61.93  07/01/2018 \$41.21 \$10.25 \$11.74 \$0.00 \$63.20  12/30/2018 \$41.91 \$10.50 \$12.06 \$0.00 \$64.47  06/30/2019 \$42.66 \$10.75 \$12.33 \$0.00 \$65.74  12/29/2019 \$43.41 \$11.00 \$12.60 \$0.00 \$67.01  For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"  FIREMAN  OPERATING ENGINEERS LOCAL 98  06/01/2017 \$33.35 \$10.79 \$12.75 \$0.00 \$56.89  12/01/2017 \$33.95 \$10.79 \$13.02 \$0.00 \$57.76  06/01/2018 \$34.56 \$10.79 \$13.29 \$0.00 \$58.64  12/01/2018 \$35.16 \$10.79 \$13.56 \$0.00 \$59.51  06/01/2019 \$35.67 \$10.79 \$13.83 \$0.00 \$60.29	For apprentice rates see "Apprentice- ELECTRICIAN"						
12/31/2017 \$40.51 \$10.00 \$11.42 \$0.00 \$61.93  07/01/2018 \$41.21 \$10.25 \$11.74 \$0.00 \$63.20  12/30/2018 \$41.91 \$10.50 \$12.06 \$0.00 \$64.47  06/30/2019 \$42.66 \$10.75 \$12.33 \$0.00 \$65.74  12/29/2019 \$43.41 \$11.00 \$12.60 \$0.00 \$67.01  For apprentice rates see "Apprentice-TELECOMMUNICATIONS TECHNICIAN"  FIREMAN  OPERATING ENGINEERS LOCAL 98  12/01/2017 \$33.35 \$10.79 \$12.75 \$0.00 \$56.89  12/01/2017 \$33.95 \$10.79 \$13.02 \$0.00 \$57.76  06/01/2018 \$34.56 \$10.79 \$13.29 \$0.00 \$58.64  12/01/2018 \$35.16 \$10.79 \$13.56 \$0.00 \$59.51  06/01/2019 \$35.67 \$10.79 \$13.83 \$0.00 \$60.29		07/02/2017	\$40.01	\$9.60	\$11.20	\$0.00	\$60.81
12/30/2018 \$41.91 \$10.50 \$12.06 \$0.00 \$64.47  06/30/2019 \$42.66 \$10.75 \$12.33 \$0.00 \$65.74  12/29/2019 \$43.41 \$11.00 \$12.60 \$0.00 \$67.01  For apprentice rates see "Apprentice-TELECOMMUNICATIONS TECHNICIAN"  06/01/2017 \$33.35 \$10.79 \$12.75 \$0.00 \$56.89  12/01/2017 \$33.95 \$10.79 \$13.02 \$0.00 \$57.76  06/01/2018 \$34.56 \$10.79 \$13.29 \$0.00 \$58.64  12/01/2018 \$35.16 \$10.79 \$13.56 \$0.00 \$59.51  06/01/2019 \$35.67 \$10.79 \$13.83 \$0.00 \$60.29		12/31/2017	\$40.51	\$10.00	\$11.42	\$0.00	\$61.93
06/30/2019   \$42.66   \$10.75   \$12.33   \$0.00   \$65.74     12/29/2019   \$43.41   \$11.00   \$12.60   \$0.00   \$67.01     For apprentice rates see "Apprentice-Telecommunications technician"		07/01/2018	\$41.21	\$10.25	\$11.74	\$0.00	\$63.20
12/29/2019   \$43.41   \$11.00   \$12.60   \$0.00   \$67.01		12/30/2018	\$41.91	\$10.50	\$12.06	\$0.00	\$64.47
FIREMAN OPERATING ENGINEERS LOCAL 98  12/01/2017 \$33.35 \$10.79 \$12.75 \$0.00 \$56.89  12/01/2017 \$33.95 \$10.79 \$13.02 \$0.00 \$57.76  06/01/2018 \$34.56 \$10.79 \$13.29 \$0.00 \$58.64  12/01/2018 \$35.16 \$10.79 \$13.56 \$0.00 \$59.51  06/01/2019 \$35.67 \$10.79 \$13.83 \$0.00 \$60.29		06/30/2019	\$42.66	\$10.75	\$12.33	\$0.00	\$65.74
OPERATING ENGINEERS LOCAL 98       00/01/2017       \$33.95       \$10.79       \$13.02       \$0.00       \$57.76         06/01/2018       \$34.56       \$10.79       \$13.29       \$0.00       \$58.64         12/01/2018       \$35.16       \$10.79       \$13.56       \$0.00       \$59.51         06/01/2019       \$35.67       \$10.79       \$13.83       \$0.00       \$60.29	For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"	12/29/2019	\$43.41	\$11.00	\$12.60	\$0.00	\$67.01
12/01/2017       \$33.95       \$10.79       \$13.02       \$0.00       \$57.76         06/01/2018       \$34.56       \$10.79       \$13.29       \$0.00       \$58.64         12/01/2018       \$35.16       \$10.79       \$13.56       \$0.00       \$59.51         06/01/2019       \$35.67       \$10.79       \$13.83       \$0.00       \$60.29	FIREMAN	06/01/2017	\$33.35	\$10.79	\$12.75	\$0.00	\$56.89
06/01/2018       \$34.56       \$10.79       \$13.29       \$0.00       \$58.64         12/01/2018       \$35.16       \$10.79       \$13.56       \$0.00       \$59.51         06/01/2019       \$35.67       \$10.79       \$13.83       \$0.00       \$60.29	OPERATING ENGINEERS LOCAL 98	12/01/2017		\$10.79	\$13.02	\$0.00	
12/01/2018       \$35.16       \$10.79       \$13.56       \$0.00       \$59.51         06/01/2019       \$35.67       \$10.79       \$13.83       \$0.00       \$60.29					\$13.29	\$0.00	\$58.64
06/01/2019 \$35.67 \$10.79 \$13.83 \$0.00 \$60.29		12/01/2018		\$10.79	\$13.56	\$0.00	\$59.51
		06/01/2019			\$13.83	\$0.00	
		12/01/2019	\$36.27	\$10.79	\$14.10	\$0.00	

Issue Date: 10/30/2017 Wage Request Number: 20171030-036 Page 10 of 32

Apprentice -	OPERATING ENGINEERS - Local 98 Class 3
Effective Date	06/01/2017

1 - P	prentice							
Ef	fective Date -	06/01/2017				Supplemental		
Ste	ep percent	Арр	rentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	60		\$20.01	\$10.79	\$12.75	\$0.00	\$43.55	
2	70		\$23.35	\$10.79	\$12.75	\$0.00	\$46.89	
3	80		\$26.68	\$10.79	\$12.75	\$0.00	\$50.22	
4	90		\$30.02	\$10.79	\$12.75	\$0.00	\$53.56	
Ef	fective Date -	12/01/2017				Supplemental		
Ste	ep percent	App	rentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	60		\$20.37	\$10.79	\$13.02	\$0.00	\$44.18	
2	70		\$23.77	\$10.79	\$13.02	\$0.00	\$47.58	
3	80		\$27.16	\$10.79	\$13.02	\$0.00	\$50.97	
4	90		\$30.56	\$10.79	\$13.02	\$0.00	\$54.37	
No	otes:							
	Steps 1-2	are 1000 hrs.; Steps 3-4 are 2000	hrs.					
A	prentice to Jou	urneyworker Ratio:1:6						
AGGER & SIGN BORERS - ZONE 4 (F	,	Y & HIGHWAY)	12/01/2016	5 \$20.50	\$7.60	\$12.45	\$0.00	\$40.55
For apprentice rates	s see "Apprentice- L	ABORER (Heavy and Highway)						
LOORCOVERER			03/01/2016	5 \$32.60	\$8.55	\$14.42	\$0.00	\$55.57
LOODCOVEREDCIO	C 41 2169 ZONE III							

#### Apprentice - FLOORCOVERER - Local 2168 Zone III

FLOORCOVERERS LOCAL 2168 ZONE III

	ive Date - 03/01/2016				Supplemental		
tep	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	50	\$16.30	\$8.55	\$1.20	\$0.00	\$26.05	
2	55	\$17.93	\$8.55	\$1.20	\$0.00	\$27.68	
3	60	\$19.56	\$8.55	\$10.82	\$0.00	\$38.93	
4	65	\$21.19	\$8.55	\$10.82	\$0.00	\$40.56	
5	70	\$22.82	\$8.55	\$12.02	\$0.00	\$43.39	
6	75	\$24.45	\$8.55	\$12.02	\$0.00	\$45.02	
7	80	\$26.08	\$8.55	\$13.22	\$0.00	\$47.85	
8	85	\$27.71	\$8.55	\$13.22	\$0.00	\$49.48	

Apprentice to Journeyworker Ratio:1:1

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FORK LIFT	06/01/2017	\$33.57	\$10.79	\$12.75	\$0.00	\$57.11
OPERATING ENGINEERS LOCAL 98	12/01/2017	\$34.17	\$10.79	\$13.02	\$0.00	\$57.98
	06/01/2018	\$34.78	\$10.79	\$13.29	\$0.00	\$58.86
	12/01/2018	\$35.38	\$10.79	\$13.56	\$0.00	\$59.73
	06/01/2019	\$35.89	\$10.79	\$13.83	\$0.00	\$60.51
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2019	\$36.49	\$10.79	\$14.10	\$0.00	\$61.38
GENERATORS/LIGHTING PLANTS	06/01/2017	\$30.12	\$10.79	\$12.75	\$0.00	\$53.66
OPERATING ENGINEERS LOCAL 98	12/01/2017	\$30.72	\$10.79	\$13.02	\$0.00	\$54.53
	06/01/2018	\$31.33	\$10.79	\$13.29	\$0.00	\$55.41
	12/01/2018	\$31.93	\$10.79	\$13.56	\$0.00	\$56.28
	06/01/2019	\$32.44	\$10.79	\$13.83	\$0.00	\$57.06
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2019	\$33.04	\$10.79	\$14.10	\$0.00	\$57.93
GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR	06/01/2017	\$36.28	\$10.25	\$8.95	\$0.00	\$55.48
SYSTEMS) GLAZIERS LOCAL 1333	06/01/2018	\$37.18	\$10.40	\$9.35	\$0.00	\$56.93
	06/01/2019	\$38.18	\$10.60	\$9.90	\$0.00	\$58.68
	06/01/2020	\$39.18	\$10.80	\$10.45	\$0.00	\$60.43

Apprentice -	GLAZIER - Local 1333
ADDI CHUCE -	OLIILILI - Locui 1555

Liicu	ve Date -	06/01/2017				Supplemental	
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	50		\$18.14	\$10.25	\$1.45	\$0.00	\$29.84
2	56		\$20.41	\$10.25	\$1.45	\$0.00	\$32.11
3	63		\$22.68	\$10.25	\$1.95	\$0.00	\$34.88
4	69		\$24.94	\$10.25	\$1.95	\$0.00	\$37.14
5	75		\$27.21	\$10.25	\$2.45	\$0.00	\$39.91
6	81		\$29.48	\$10.25	\$2.45	\$0.00	\$42.18
7	88		\$31.75	\$10.25	\$8.95	\$0.00	\$50.95
8	94		\$34.01	\$10.25	\$8.95	\$0.00	\$53.21
Effecti	ve Date -	06/01/2018				Supplemental	
			Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
Step	percent		Appletitice base wage	Hourm	1 CHSIOH	Chemployment	Total Rate
	50		\$18.59	\$10.40	\$1.60	\$0.00	\$30.59
1	•					* *	
Step 1 2 3	50		\$18.59	\$10.40	\$1.60	\$0.00	\$30.59
1 2 3	50 56		\$18.59 \$20.91	\$10.40 \$10.40	\$1.60 \$1.60	\$0.00 \$0.00	\$30.59 \$32.91
1 2 3	50 56 63		\$18.59 \$20.91 \$23.24	\$10.40 \$10.40 \$10.40	\$1.60 \$1.60 \$2.10	\$0.00 \$0.00 \$0.00	\$30.59 \$32.91 \$35.74
1 2 3 4	50 56 63 69		\$18.59 \$20.91 \$23.24 \$25.56	\$10.40 \$10.40 \$10.40 \$10.40	\$1.60 \$1.60 \$2.10 \$2.10	\$0.00 \$0.00 \$0.00 \$0.00	\$30.59 \$32.91 \$35.74 \$38.06
1 2 3 4 5	50 56 63 69 75		\$18.59 \$20.91 \$23.24 \$25.56 \$27.89	\$10.40 \$10.40 \$10.40 \$10.40 \$10.40	\$1.60 \$1.60 \$2.10 \$2.10 \$2.60	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$30.59 \$32.91 \$35.74 \$38.06 \$40.89

Apprentice to Journeyworker Ratio:1:3

**Issue Date:** 10/30/2017 **Wage Request Number:** 20171030-036 **Page 12 of 32** 

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
GRADER/TRENCHING MACHINE/DERRICK	06/01/2017	\$33.88	\$10.79	\$12.75	\$0.00	\$57.42
OPERATING ENGINEERS LOCAL 98	12/01/2017	\$34.48	\$10.79	\$13.02	\$0.00	\$58.29
	06/01/2018	\$35.09	\$10.79	\$13.29	\$0.00	\$59.17
	12/01/2018	\$35.69	\$10.79	\$13.56	\$0.00	\$60.04
	06/01/2019	\$36.20	\$10.79	\$13.83	\$0.00	\$60.82
	12/01/2019	\$36.80	\$10.79	\$14.10	\$0.00	\$61.69
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
HVAC (DUCTWORK) SHEETMETAL WORKERS LOCAL 63	07/01/2017	\$32.24	\$10.64	\$16.22	\$1.77	\$60.87
	01/01/2018	\$32.99	\$10.64	\$16.22	\$1.77	\$61.62
	07/01/2018	\$33.74	\$10.64	\$16.22	\$1.77	\$62.37
	01/01/2019	\$34.74	\$10.64	\$16.22	\$1.77	\$63.37
	07/01/2019	\$35.74	\$10.64	\$16.22	\$1.77	\$64.37
	01/01/2020	\$36.99	\$10.64	\$16.22	\$1.77	\$65.62
For apprentice rates see "Apprentice- SHEET METAL WORKER"						
HVAC (ELECTRICAL CONTROLS)  ELECTRICIANS LOCAL 7	07/02/2017	\$40.01	\$9.60	\$11.20	\$0.00	\$60.81
2220.110.1110.200.127	12/31/2017	\$40.51	\$10.00	\$11.42	\$0.00	\$61.93
	07/01/2018	\$41.21	\$10.25	\$11.74	\$0.00	\$63.20
	12/30/2018	\$41.91	\$10.50	\$12.06	\$0.00	\$64.47
	06/30/2019	\$42.66	\$10.75	\$12.33	\$0.00	\$65.74
	12/29/2019	\$43.41	\$11.00	\$12.60	\$0.00	\$67.01
For apprentice rates see "Apprentice- ELECTRICIAN"						
HVAC (TESTING AND BALANCING - AIR) SHEETMETAL WORKERS LOCAL 63	07/01/2017	\$32.24	\$10.64	\$16.22	\$1.77	\$60.87
	01/01/2018	\$32.99	\$10.64	\$16.22	\$1.77	\$61.62
	07/01/2018	\$33.74	\$10.64	\$16.22	\$1.77	\$62.37
	01/01/2019	\$34.74	\$10.64	\$16.22	\$1.77	\$63.37
	07/01/2019	\$35.74	\$10.64	\$16.22	\$1.77	\$64.37
	01/01/2020	\$36.99	\$10.64	\$16.22	\$1.77	\$65.62
For apprentice rates see "Apprentice- SHEET METAL WORKER"						
HVAC (TESTING AND BALANCING -WATER) PLUMBERS & PIPEFITTERS LOCAL 104 WESTERN DIVISION	09/17/2017	\$38.03	\$8.50	\$15.30	\$0.00	\$61.83
	03/17/2018	\$39.08	\$8.50	\$15.30	\$0.00	\$62.88
	09/17/2018	\$40.33	\$8.50	\$15.30	\$0.00	\$64.13
	03/17/2019	\$41.58	\$8.50	\$15.30	\$0.00	\$65.38
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HVAC MECHANIC PLUMBERS & PIPEFITTERS LOCAL 104 WESTERN DIVISION	09/17/2017	\$38.03	\$8.50	\$15.30	\$0.00	\$61.83
	03/17/2018	\$39.08	\$8.50	\$15.30	\$0.00	\$62.88
	09/17/2018	\$40.33	\$8.50	\$15.30	\$0.00	\$64.13
For any office with a self-time of Properties and the Properties and t	03/17/2019	\$41.58	\$8.50	\$15.30	\$0.00	\$65.38
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"  HYDRAULIC DRILLS (HEAVY & HIGHWAY)  LABORERS - ZONE 4 (HEAVY & HIGHWAY)	12/01/2016	\$27.17	\$7.60	\$12.45	\$0.00	\$47.22
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
INSULATOR (PIPES & TANKS)	00/01/2017	¢27.67	¢11.75	\$14.20	00.02	\$(2.62
HEAT & FROST INSULATORS LOCAL 6 (SPRINGFIELD)	09/01/2017	\$37.67	\$11.75	\$14.20	\$0.00	\$63.62
	09/01/2018	\$39.47	\$11.75	\$14.20	\$0.00	\$65.42
	09/01/2019	\$41.47	\$11.75	\$14.20	\$0.00	\$67.42

 Issue Date:
 10/30/2017
 Wage Request Number:
 20171030-036
 Page 13 of 32

LABORERS - ZONE 4 (BUILDING & SITE)

1 2	50 60		\$18.84 \$22.60	\$11.75 \$11.75	\$10.45 \$11.20	\$0.00 \$0.00	\$41.04 \$45.55	
3	70		\$22.80 \$26.37	\$11.75	\$11.20 \$11.95	\$0.00	\$43.33 \$50.07	
4	80		\$30.14	\$11.75	\$12.70	\$0.00	\$54.59	
Effe	ctive Date -	09/01/2018				Supplemental		
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	50		\$19.74	\$11.75	\$10.45	\$0.00	\$41.94	
2	60		\$23.68	\$11.75	\$11.20	\$0.00	\$46.63	
3	70		\$27.63	\$11.75	\$11.95	\$0.00	\$51.33	
4	80		\$31.58	\$11.75	\$12.70	\$0.00	\$56.03	
Note	es: Steps are	1 year						
	— <u></u>	urneyworker Ratio:1:4						
NWORKER/WE	LDER	arney worker reactories	05/01/201	7 \$30.50	\$6.50	\$18.55	\$0.00	\$55.5
DNWORKER/WE NWORKERS LOCAL I	LDER 12 rentice - IR	ONWORKER - Local 12	05/01/201	7 \$30.50	\$6.50	\$18.55	\$0.00	\$55.5
NWORKER/WE IWORKERS LOCAL I	LDER  2  rentice - IR  ctive Date -					Supplemental		\$55.5
ONWORKER/WE NWORKERS LOCAL I App Effe Step	rentice - IR ctive Date -	ONWORKER - Local 12	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	\$55.5
ONWORKER/WE NWORKERS LOCAL II  App Effe Step 1	rentice - IR ctive Date - percent 60	ONWORKER - Local 12	Apprentice Base Wage \$18.30	Health \$6.50	Pension \$3.25	Supplemental Unemployment \$0.00	Total Rate \$28.05	\$55.5
App Effe Step 1	rentice - IR ctive Date - percent 60 70	ONWORKER - Local 12	Apprentice Base Wage \$18.30 \$21.35	Health \$6.50 \$6.50	Pension \$3.25 \$13.78	Supplemental Unemployment \$0.00 \$0.00	Total Rate \$28.05 \$41.63	\$55.5
ONWORKER/WE NWORKERS LOCAL II  App Effe Step 1	rentice - IR ctive Date - percent 60	ONWORKER - Local 12	Apprentice Base Wage \$18.30	Health \$6.50	Pension \$3.25	Supplemental Unemployment \$0.00	Total Rate \$28.05	\$55.5
App Effe Step  2 3	rentice - IR ctive Date - percent 60 70 80 90	ONWORKER - Local 12 05/01/2017	Apprentice Base Wage \$18.30 \$21.35 \$24.40	Health \$6.50 \$6.50 \$6.50	Pension \$3.25 \$13.78 \$15.29	Supplemental Unemployment \$0.00 \$0.00 \$0.00	Total Rate \$28.05 \$41.63 \$46.19	\$55.5
App Effe Step 1 2 3 4	rentice - IR ctive Date - percent 60 70 80 90 es: Steps are	ONWORKER - Local 12 05/01/2017	Apprentice Base Wage \$18.30 \$21.35 \$24.40	Health \$6.50 \$6.50 \$6.50	Pension \$3.25 \$13.78 \$15.29	Supplemental Unemployment \$0.00 \$0.00 \$0.00	Total Rate \$28.05 \$41.63 \$46.19	\$55.5
App Effe Step 1 2 3 4  Note	rentice - IR ctive Date - percent 60 70 80 90 es: Steps are	ONWORKER - Local 12 05/01/2017  1 year urneyworker Ratio:1:4 EAKER OPERATOR	Apprentice Base Wage \$18.30 \$21.35 \$24.40	Health \$6.50 \$6.50 \$6.50 \$6.50	Pension \$3.25 \$13.78 \$15.29 \$16.80	Supplemental Unemployment \$0.00 \$0.00 \$0.00	Total Rate \$28.05 \$41.63 \$46.19	\$55.5 \$44.4

**Total Rate** 

	Step	ive <b>Date</b> - 12/01/2016 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	60	\$15.30	\$7.60	\$11.10	\$0.00	\$34.00	
	2	70	\$17.85	\$7.60	\$11.10	\$0.00	\$36.55	
	3	80	\$20.40	\$7.60	\$11.10	\$0.00	\$39.10	
	4	90	\$22.95	\$7.60	\$11.10	\$0.00	\$41.65	
	Notes							
	Appre	entice to Journeyworker Ratio:1:5						
		t HIGHWAY) Y & HIGHWAY)	12/01/2016	\$26.42	\$7.60	\$12.45	\$0.00	\$46.47
	Appre	ntice - LABORER (Heavy and Hig	hway) - Zone 4					
		ive Date - 12/01/2016				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	60	\$15.85	\$7.60	\$12.45	\$0.00	\$35.90	
	2	70	\$18.49	\$7.60	\$12.45	\$0.00	\$38.54	
	3	80	\$21.14	\$7.60	\$12.45	\$0.00	\$41.19	
	4	90	\$23.78	\$7.60	\$12.45	\$0.00	\$43.83	
	Notes:							
	Appre	entice to Journeyworker Ratio:1:5						
		TER TENDER DING & SITE)	12/01/2016	\$25.50	\$7.60	\$11.10	\$0.00	\$44.20
	e rates see	"Apprentice- LABORER"						
For apprentic	<b>EMENT</b>	FINISHER TENDER DING & SITE)	12/01/2016	\$25.50	\$7.60	\$11.10	\$0.00	\$44.20
BORER: C	,						\$0.00	\$45.05
BORER: C ORERS - ZON For apprentic	e rates see	"Apprentice- LABORER" OUS WASTE/ASBESTOS REMOV	ER 06/01/2017	\$26.10	\$7.60	\$11.35		
BORER: C ORERS - ZON For apprentic BORER: H	e rates see	"Apprentice- LABORER"  OUS WASTE/ASBESTOS REMOV	00/01/201/		\$7.60 \$7.60	\$11.35 \$11.35		\$45.80
BORER: C ORERS - ZON For apprentic BORER: H	e rates see	OUS WASTE/ASBESTOS REMOV	12/01/2017	\$26.85	\$7.60	\$11.35	\$0.00	\$45.80 \$46.55
BORER: C ORERS - ZON For apprentic BORER: H	e rates see	OUS WASTE/ASBESTOS REMOV	12/01/2017 06/01/2018	\$26.85 \$27.60	\$7.60 \$7.60	\$11.35 \$11.35	\$0.00 \$0.00	\$46.55
BORER: C ORERS - ZON For apprentic BORER: H	e rates see	OUS WASTE/ASBESTOS REMOV	12/01/2017 06/01/2018 12/01/2018	\$26.85 \$27.60 \$28.35	\$7.60 \$7.60 \$7.60	\$11.35 \$11.35 \$11.35	\$0.00 \$0.00 \$0.00	\$46.55 \$47.30
BORER: C ORERS - ZON For apprentic BORER: H	e rates see	OUS WASTE/ASBESTOS REMOV	12/01/2017 06/01/2018 12/01/2018 06/01/2019	\$26.85 \$27.60 \$28.35 \$29.10	\$7.60 \$7.60 \$7.60 \$7.60	\$11.35 \$11.35 \$11.35 \$11.35	\$0.00 \$0.00 \$0.00 \$0.00	\$46.55 \$47.30 \$48.05
BORER: C ORERS - ZON For apprentic BORER: H ORERS - ZON	AZARD	OUS WASTE/ASBESTOS REMOV	12/01/2017 06/01/2018 12/01/2018	\$26.85 \$27.60 \$28.35 \$29.10	\$7.60 \$7.60 \$7.60	\$11.35 \$11.35 \$11.35	\$0.00 \$0.00 \$0.00	\$46.55 \$47.30 \$48.05
BORER: C CORERS - ZON For apprentic BORERS - ZON For apprentic BORERS - ZON	AZARD JE 4 (BUILL  e rates see	OUS WASTE/ASBESTOS REMOV DING & SITE)  "Apprentice- LABORER"	12/01/2017 06/01/2018 12/01/2018 06/01/2019	\$26.85 \$27.60 \$28.35 \$29.10 \$29.85	\$7.60 \$7.60 \$7.60 \$7.60	\$11.35 \$11.35 \$11.35 \$11.35	\$0.00 \$0.00 \$0.00 \$0.00	\$45.80 \$46.55 \$47.30 \$48.05 \$48.80 \$46.20
BORER: CORERS - ZON For apprentic BORERS - ZON For apprentic BORER: MORERS - ZON	AZARD JE 4 (BUILL  The rates see  ASON THE 4 (BUILL  JE 4 (BUILL)	OUS WASTE/ASBESTOS REMOV DING & SITE)  "Apprentice- LABORER"	12/01/2017 06/01/2018 12/01/2018 06/01/2019 12/01/2019	\$26.85 \$27.60 \$28.35 \$29.10 \$29.85	\$7.60 \$7.60 \$7.60 \$7.60 \$7.60	\$11.35 \$11.35 \$11.35 \$11.35 \$11.35	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$46.55 \$47.30 \$48.05 \$48.80

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	<b>Total Rate</b>
LABORER: MULTI-TRADE TENDER  LABORERS - ZONE 4 (BUILDING & SITE)	12/01/2016	\$25.50	\$7.60	\$11.10	\$0.00	\$44.20
For apprentice rates see "Apprentice- LABORER"						
LABORER: TREE REMOVER LABORERS - ZONE 4 (BUILDING & SITE)	12/01/2016	\$25.50	\$7.60	\$11.10	\$0.00	\$44.20
This classification applies to all tree work associated with the removal of standing tre a utility company for the purpose of operation, maintenance or repair of utility company					s not done for	
LASER BEAM OPERATOR  LABORERS - ZONE 4 (BUILDING & SITE)	12/01/2016	\$25.75	\$7.60	\$11.10	\$0.00	\$44.45
For apprentice rates see "Apprentice- LABORER"						
LASER BEAM OPERATOR (HEAVY & HIGHWAY)  LABORERS - ZONE 4 (HEAVY & HIGHWAY)	12/01/2016	\$26.67	\$7.60	\$12.45	\$0.00	\$46.72
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
MARBLE & TILE FINISHERS	09/01/2017	\$33.67	\$10.75	\$17.15	\$0.00	\$61.57
BRICKLAYERS LOCAL 3 (SPR/PITT) - MARBLE & TILE	03/01/2018	\$34.17	\$10.75	\$17.15	\$0.00	\$62.07
	08/01/2018	\$35.17	\$10.75	\$17.26	\$0.00	\$63.18
	02/01/2019	\$35.67	\$10.75	\$17.26	\$0.00	\$63.68
	08/01/2019	\$36.67	\$10.75	\$17.37	\$0.00	\$64.79
	02/01/2020	\$37.17	\$10.75	\$17.37	\$0.00	\$65.29
	08/01/2020	\$38.17	\$10.75	\$17.49	\$0.00	\$66.41
	02/01/2021	\$38.67	\$10.75	\$17.49	\$0.00	\$66.91
	08/01/2021	\$39.67	\$10.75	\$17.62	\$0.00	\$68.04
	02/01/2022	\$40.12	\$10.75	\$17.62	\$0.00	\$68.49

**Apprentice -** MARBLE-TILE FINISHER-Local 3 Marble/Tile (Spr/Pitt)

Effecti	ve Date -	09/01/2017				Supplemental	
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	50		\$16.84	\$10.75	\$17.15	\$0.00	\$44.74
2	60		\$20.20	\$10.75	\$17.15	\$0.00	\$48.10
3	70		\$23.57	\$10.75	\$17.15	\$0.00	\$51.47
4	80		\$26.94	\$10.75	\$17.15	\$0.00	\$54.84
5	90		\$30.30	\$10.75	\$17.15	\$0.00	\$58.20
Effecti	ve Date -	03/01/2018				Supplemental	
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	50		\$17.09	\$10.75	\$17.15	\$0.00	\$44.99
2	60		\$20.50	\$10.75	\$17.15	\$0.00	\$48.40
3	70		\$23.92	\$10.75	\$17.15	\$0.00	\$51.82
4	80		\$27.34	\$10.75	\$17.15	\$0.00	\$55.24
5	90		\$30.75	\$10.75	\$17.15	\$0.00	\$58.65
Notes:							

Apprentice to Journeyworker Ratio:1:5

**Issue Date:** 10/30/2017 **Wage Request Number:** 20171030-036 **Page 16 of 32** 

							Unemployment	
		ELAYERS & TERRAZZO MECH PITT) - MARBLE & TILE	08/01/2017	\$52.10	\$10.75	\$19.35	\$0.00	\$82.20
	(51 101	111) 13.111.52.5 & 112.5	02/01/2018	\$52.78	\$10.75	\$19.35	\$0.00	\$82.88
			08/01/2018	\$54.13	\$10.75	\$19.48	\$0.00	\$84.36
			02/01/2019	\$54.75	\$10.75	\$19.48	\$0.00	\$84.98
			08/01/2019	\$56.10	\$10.75	\$19.62	\$0.00	\$86.47
			02/01/2020	\$56.73	\$10.75	\$19.62	\$0.00	\$87.10
			08/01/2020	\$58.08	\$10.75	\$19.77	\$0.00	\$88.60
			02/01/2021	\$58.72	\$10.75	\$19.77	\$0.00	\$89.24
			08/01/2021	\$60.12	\$10.75	\$19.93	\$0.00	\$90.80
			02/01/2022	\$60.69	\$10.75	\$19.93	\$0.00	\$91.37
Eí	ffective	ce - MARBLE-TILE-TERRAZZO M Date - 08/01/2017  percent	MECH - Local 3 Marble/1 Apprentice Base Wage		Pension	Supplemental Unemployment		
1		50	\$26.05	\$10.75	\$19.35	\$0.00		
2		60	\$31.26	\$10.75	\$19.35	\$0.00		
3		70	\$36.47	\$10.75	\$19.35	\$0.00		
4		80	\$41.68	\$10.75	\$19.35	\$0.00	\$71.78	
5		90	\$46.89	\$10.75	\$19.35	\$0.00	\$76.99	
	ffective	<b>Date</b> - 02/01/2018 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment		
$\frac{3t}{1}$		50	\$26.39	\$10.75	\$19.35	\$0.00		
2		60						
3		70	\$31.67	\$10.75	\$19.35	\$0.00		
4		80	\$36.95	\$10.75	\$19.35	\$0.00		
5			\$42.22	\$10.75	\$19.35	\$0.00		
3		90	\$47.50	\$10.75	\$19.35	\$0.00	\$77.60	
Ne	otes:							
A	pprent	ice to Journeyworker Ratio:1:5						
		RATOR (ON CONST. SITES)	06/01/2017	7 \$33.88	\$10.79	\$12.75	\$0.00	\$57.42
PERATING ENGINEE	ERS LOC.	AL 98	12/01/2017	\$34.48	\$10.79	\$13.02	\$0.00	\$58.29
			06/01/2018	\$35.09	\$10.79	\$13.29	\$0.00	\$59.17
			12/01/2018	\$35.69	\$10.79	\$13.56	\$0.00	\$60.04
			06/01/2019	\$36.20	\$10.79	\$13.83	\$0.00	\$60.82
			12/01/2019	\$36.80	\$10.79	\$14.10	\$0.00	\$61.69
		prentice- OPERATING ENGINEERS"						
IECHANIC/WEL PERATING ENGINEE			06/01/2017	\$33.35	\$10.79	\$12.75	\$0.00	\$56.89
I ENATING ENGINEE	ZNS LUC	AL 70	12/01/2017	\$33.95	\$10.79	\$13.02	\$0.00	\$57.76
			06/01/2018	\$34.56	\$10.79	\$13.29	\$0.00	\$58.64
			12/01/2018	\$35.16	\$10.79	\$13.56	\$0.00	\$59.51
			06/01/2019	\$35.67	\$10.79	\$13.83	\$0.00	\$60.29
		oprentice- OPERATING ENGINEERS"	12/01/2019	\$36.27	\$10.79	\$14.10	\$0.00	\$61.16

Wage Request Number:

20171030-036

**Effective Date** 

Base Wage

Health

Pension

Classification

**Issue Date:** 

10/30/2017

Supplemental

Unemployment

**Total Rate** 

Page 17 of 32

									A
				10/01/2018	\$36.29	\$9.90	\$18.50	\$0.00	\$64.69
				04/01/2019	\$37.11	\$9.90	\$18.50	\$0.00	\$65.51
			LWRIGHT - Local 1121 10/01/2017	Zone 3			Supplemental		
	Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	0		\$0.00	\$9.90	\$5.31	\$21.74	\$36.95	
	2	0		\$0.00	\$9.90	\$15.13	\$25.69	\$50.72	
	3	0		\$0.00	\$9.90	\$16.10	\$29.64	\$55.64	
	4	0		\$0.00	\$9.90	\$17.06	\$33.59	\$60.55	
			04/01/2018		14		Supplemental		
	Step	percent		Apprentice Base Wage		Pension	Unemployment	Total Rate	
	1	0		\$0.00	\$9.90	\$5.31	\$22.23	\$37.44	
	2	0		\$0.00	\$9.90	\$15.13	\$26.27	\$51.30	
	3	0		\$0.00	\$9.90	\$16.10	\$30.32	\$56.32	
	4	0		\$0.00	\$9.90	\$17.06	\$34.36	\$61.32	
		Steps are 2,0	000 hours	e 1 Unemployment" column — — — — — — —					
	Appren	Steps are 2,0			\$25.75	\$7.60	\$11.10	\$0.00	\$44.45
BORERS - ZO	Appren IXER ONE 4 (BUILD)	Steps are 2,0 tice to Journ	000 hoursneyworker Ratio:1:5	Unemployment" column	\$25.75	\$7.60	\$11.10	\$0.00	\$44.45
For apprenti	Appren IXER ONE 4 (BUILD)	Steps are 2,0	000 hoursneyworker Ratio:1:5	Unemployment" column					
For apprenti	Appren IXER ONE 4 (BUILD) ice rates see "A	Steps are 2,0 tice to Journ ING & SITE) Apprentice- LAE	000 hoursneyworker Ratio:1:5	Unemployment" column	\$29.04	\$10.79	\$12.75	\$0.00	\$52.58
For apprenti	Appren IXER ONE 4 (BUILD) ice rates see "A	Steps are 2,0 tice to Journ ING & SITE) Apprentice- LAE	000 hoursneyworker Ratio:1:5	Unemployment" column  12/01/2016  06/01/2017  12/01/2017	\$29.04 \$29.64	\$10.79 \$10.79	\$12.75 \$13.02	\$0.00 \$0.00	\$52.58 \$53.45
For apprenti	Appren IXER ONE 4 (BUILD) ice rates see "A	Steps are 2,0 tice to Journ ING & SITE) Apprentice- LAE	000 hoursneyworker Ratio:1:5	Unemployment" column  12/01/2016  06/01/2017  12/01/2018	\$29.04 \$29.64 \$30.25	\$10.79 \$10.79 \$10.79	\$12.75 \$13.02 \$13.29	\$0.00 \$0.00 \$0.00	\$52.58 \$53.45 \$54.33
For apprenti	Appren IXER ONE 4 (BUILD) ice rates see "A	Steps are 2,0 tice to Journ ING & SITE) Apprentice- LAE	000 hoursneyworker Ratio:1:5	Unemployment" column  12/01/2016  06/01/2017  12/01/2017  06/01/2018  12/01/2018	\$29.04 \$29.64 \$30.25 \$30.85	\$10.79 \$10.79 \$10.79 \$10.79	\$12.75 \$13.02 \$13.29 \$13.56	\$0.00 \$0.00 \$0.00 \$0.00	\$52.58 \$53.45 \$54.33 \$55.20
For apprenti	Appren IXER ONE 4 (BUILD) ice rates see "A	Steps are 2,0 tice to Journ ING & SITE) Apprentice- LAE	000 hoursneyworker Ratio:1:5	Unemployment" column  12/01/2016  06/01/2017 12/01/2018 12/01/2018 06/01/2019	\$29.04 \$29.64 \$30.25 \$30.85 \$31.36	\$10.79 \$10.79 \$10.79 \$10.79 \$10.79	\$12.75 \$13.02 \$13.29 \$13.56 \$13.83	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$52.58 \$53.45 \$54.33 \$55.20 \$55.98
ABORERS - ZO.  For apprenti  ILER  PERATING EN	Appren IXER DIE 4 (BUILD) ice rates see "A	Steps are 2,0 tice to Journ  ING & SITE) Apprentice- LAE  CAL 98	000 hoursneyworker Ratio:1:5	Unemployment" column  12/01/2016  06/01/2017  12/01/2017  06/01/2018  12/01/2018	\$29.04 \$29.64 \$30.25 \$30.85 \$31.36	\$10.79 \$10.79 \$10.79 \$10.79	\$12.75 \$13.02 \$13.29 \$13.56	\$0.00 \$0.00 \$0.00 \$0.00	\$52.58 \$53.45 \$54.33 \$55.20 \$55.98
For apprenti For apprenti For apprenti For apprenti	Appren IXER IXER IXER IXER IXER IXER IXER IXER	Steps are 2,0 tice to Journ  ING & SITE) Apprentice- LAE  CAL 98  Apprentice- OPE EN EQUIPM	neyworker Ratio:1:5	Unemployment" column  12/01/2016  06/01/2017 12/01/2018 12/01/2018 06/01/2019	\$29.04 \$29.64 \$30.25 \$30.85 \$31.36 \$31.96	\$10.79 \$10.79 \$10.79 \$10.79 \$10.79	\$12.75 \$13.02 \$13.29 \$13.56 \$13.83	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$52.58 \$53.45 \$54.33 \$55.20 \$55.98 \$56.85
For apprenti For apprenti For apprenti For apprenti	Appren IXER IXER IXER IXER IXER IXER IXER IXER	Steps are 2,0 tice to Journ  ING & SITE) Apprentice- LAE  CAL 98  Apprentice- OPE EN EQUIPM	neyworker Ratio:1:5  BORER"  ERATING ENGINEERS"	Unemployment" column  12/01/2016  06/01/2017 12/01/2018 12/01/2018 06/01/2019 12/01/2019	\$29.04 \$29.64 \$30.25 \$30.85 \$31.36 \$31.96	\$10.79 \$10.79 \$10.79 \$10.79 \$10.79 \$10.79	\$12.75 \$13.02 \$13.29 \$13.56 \$13.83 \$14.10	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$52.58 \$53.45 \$54.33 \$55.20 \$55.98 \$56.85
For apprenti ILER PERATING EN  For apprenti	Appren IXER IXER IXER IXER IXER IXER IXER IXER	Steps are 2,0 tice to Journ  ING & SITE) Apprentice- LAE  CAL 98  Apprentice- OPE EN EQUIPM	neyworker Ratio:1:5  BORER"  ERATING ENGINEERS"	Unemployment" column  12/01/2016  06/01/2017 12/01/2018 12/01/2018 06/01/2019 12/01/2019	\$29.04 \$29.64 \$30.25 \$30.85 \$31.36 \$31.96	\$10.79 \$10.79 \$10.79 \$10.79 \$10.79 \$10.79	\$12.75 \$13.02 \$13.29 \$13.56 \$13.83 \$14.10	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$52.58 \$53.45 \$54.33 \$55.20 \$55.98 \$56.85
For apprenti For apprenti For apprenti For apprenti	Appren IXER IXER IXER IXER IXER IXER IXER IXER	Steps are 2,0 tice to Journ  ING & SITE) Apprentice- LAE  CAL 98  Apprentice- OPE EN EQUIPM	neyworker Ratio:1:5  BORER"  ERATING ENGINEERS"	Unemployment" column  12/01/2016  06/01/2017 12/01/2018 12/01/2018 06/01/2019 12/01/2019 06/01/2017	\$29.04 \$29.64 \$30.25 \$30.85 \$31.36 \$31.96 \$27.06 \$27.66 \$28.27	\$10.79 \$10.79 \$10.79 \$10.79 \$10.79 \$10.79 \$10.79	\$12.75 \$13.02 \$13.29 \$13.56 \$13.83 \$14.10 \$12.75 \$13.02	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$52.58 \$53.45 \$54.33
For apprenti For apprenti For apprenti For apprenti	Appren IXER IXER IXER IXER IXER IXER IXER IXER	Steps are 2,0 tice to Journ  ING & SITE) Apprentice- LAE  CAL 98  Apprentice- OPE EN EQUIPM	neyworker Ratio:1:5  BORER"  ERATING ENGINEERS"	Unemployment" column	\$29.04 \$29.64 \$30.25 \$30.85 \$31.36 \$31.96 \$27.06 \$27.66 \$28.27 \$28.87	\$10.79 \$10.79 \$10.79 \$10.79 \$10.79 \$10.79 \$10.79 \$10.79	\$12.75 \$13.02 \$13.29 \$13.56 \$13.83 \$14.10 \$12.75 \$13.02 \$13.29	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$52.58 \$53.45 \$54.33 \$55.20 \$55.98 \$56.85 \$51.47 \$52.35 \$53.22
For apprenti For apprenti For apprenti For apprenti	Appren IXER DE 4 (BUILD) ice rates see "A UGINEERS LO	Steps are 2,0 tice to Journ  ING & SITE) Apprentice- LAE  CAL 98  Apprentice- OPE EN EQUIPM  CAL 98	neyworker Ratio:1:5  BORER"  ERATING ENGINEERS"  MENT - CLASS VI	Unemployment" column  12/01/2016  06/01/2017 12/01/2018 12/01/2018 06/01/2019 12/01/2019 06/01/2017 12/01/2017 12/01/2018	\$29.04 \$29.64 \$30.25 \$30.85 \$31.36 \$31.96 \$27.06 \$27.66 \$28.27 \$28.87 \$29.38	\$10.79 \$10.79 \$10.79 \$10.79 \$10.79 \$10.79 \$10.79 \$10.79 \$10.79	\$12.75 \$13.02 \$13.29 \$13.56 \$13.83 \$14.10 \$12.75 \$13.02 \$13.29 \$13.56	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$52.58 \$53.45 \$54.33 \$55.20 \$55.98 \$56.85 \$50.60 \$51.47 \$52.35 \$53.22 \$54.00
For apprenti OTHER POW	Appren IXER INE 4 (BUILD) ICE rates see "A VER DRIVI ICGINEERS LO	Apprentice- OPE	neyworker Ratio:1:5  BORER"  ERATING ENGINEERS"	Unemployment" column	\$29.04 \$29.64 \$30.25 \$30.85 \$31.36 \$31.96 \$27.06 \$27.66 \$28.27 \$28.87 \$29.38	\$10.79 \$10.79 \$10.79 \$10.79 \$10.79 \$10.79 \$10.79 \$10.79 \$10.79 \$10.79	\$12.75 \$13.02 \$13.29 \$13.56 \$13.83 \$14.10 \$12.75 \$13.02 \$13.29 \$13.56 \$13.83	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$52.58 \$53.45 \$54.33 \$55.20 \$55.98 \$56.85 \$50.60 \$51.47 \$52.35

**Effective Date** 

10/01/2017

04/01/2018

Base Wage

\$34.64

\$35.46

Health

\$9.90

\$9.90

Classification

MILLWRIGHT (Zone 3)

MILLWRIGHTS LOCAL 1121 - Zone 3

Supplemental

\$0.00

\$0.00

Unemployment

Pension

\$18.50

\$18.50

**Total Rate** 

\$63.04

\$63.86

**Issue Date:** 10/30/2017 **Wage Request Number:** 20171030-036 **Page 18 of 32** 

Apprentice -	PAINTER Local 35	- BRIDGES/TANKS
Effective Date	01/01/2017	

Effect	ive Date - 01/01/2017				Supplemental	
Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	50	\$25.71	\$7.85	\$0.00	\$0.00	\$33.56
2	55	\$28.28	\$7.85	\$3.66	\$0.00	\$39.79
3	60	\$30.85	\$7.85	\$3.99	\$0.00	\$42.69
4	65	\$33.42	\$7.85	\$4.32	\$0.00	\$45.59
5	70	\$35.99	\$7.85	\$14.11	\$0.00	\$57.95
6	75	\$38.56	\$7.85	\$14.44	\$0.00	\$60.85
7	80	\$41.13	\$7.85	\$14.77	\$0.00	\$63.75
8	90	\$46.27	\$7.85	\$15.44	\$0.00	\$69.56
Notes:						
i	Steps are 750 hrs.					
Appre	entice to Journeyworker Ratio:1:1					
PRAY OF	R SANDBLAST, NEW) *	01/01/2017	\$34.68	\$7.85	\$12.30	\$0.00 \$54.8

PAIN

\* If 30% or more of surfaces to be painted are new construction,

NEW paint rate shall be used. PAINTERS LOCAL 35 - ZONE 3

**Apprentice -** PAINTER Local 35 Zone 3 - Spray/Sandblast - New

Effecti	ve Date - 01/01/2017				Supplemental	
Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	50	\$17.34	\$7.85	\$0.00	\$0.00	\$25.19
2	55	\$19.07	\$7.85	\$1.57	\$0.00	\$28.49
3	60	\$20.81	\$7.85	\$1.71	\$0.00	\$30.37
4	65	\$22.54	\$7.85	\$1.85	\$0.00	\$32.24
5	70	\$24.28	\$7.85	\$11.45	\$0.00	\$43.58
6	75	\$26.01	\$7.85	\$11.59	\$0.00	\$45.45
7	80	\$27.74	\$7.85	\$11.73	\$0.00	\$47.32
8	90	\$31.21	\$7.85	\$12.02	\$0.00	\$51.08
Notes:	Steps are 750 hrs.					
	· 					
Appre	ntice to Journeyworker Ratio:1:1					
PRAY OR	SANDBLAST, REPAINT)	01/01/2017	\$32.00	\$7.85	\$12.30	\$0.00 \$52.15

**Issue Date:** 10/30/2017 Wage Request Number: 20171030-036 Page 19 of 32

Apprentice -	PAINTER Local 3	5 Zone 3 -	Spray/Sandblast	- Repaint
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Effecti	ve Date - 01/01/2017				Supplemental	
Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	50	\$16.00	\$7.85	\$0.00	\$0.00	\$23.85
2	55	\$17.60	\$7.85	\$1.57	\$0.00	\$27.02
3	60	\$19.20	\$7.85	\$1.71	\$0.00	\$28.76
4	65	\$20.80	\$7.85	\$1.85	\$0.00	\$30.50
5	70	\$22.40	\$7.85	\$11.45	\$0.00	\$41.70
6	75	\$24.00	\$7.85	\$11.59	\$0.00	\$43.44
7	80	\$25.60	\$7.85	\$11.73	\$0.00	\$45.18
8	90	\$28.80	\$7.85	\$12.02	\$0.00	\$48.67
Notes:						
	Steps are 750 hrs.					i
Appre	ntice to Journeyworker Ratio:1:1					
INTER / TAPER (BI	RUSH, NEW) *	01/01/2017	7 \$33.2	8 \$7.85	\$12.30	\$0.00 \$53.43

<sup>\*</sup> If 30% or more of surfaces to be painted are new construction,

NEW paint rate shall be used. PAINTERS LOCAL 35 - ZONE 3

**Apprentice -** PAINTER - Local 35 Zone 3 - BRUSH NEW

Effecti	ve Date - 01/01/2017				Supplemental		
Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	50	\$16.64	\$7.85	\$0.00	\$0.00	\$24.49	
2	55	\$18.30	\$7.85	\$1.57	\$0.00	\$27.72	
3	60	\$19.97	\$7.85	\$1.71	\$0.00	\$29.53	
4	65	\$21.63	\$7.85	\$1.85	\$0.00	\$31.33	
5	70	\$23.30	\$7.85	\$11.45	\$0.00	\$42.60	
6	75	\$24.96	\$7.85	\$11.59	\$0.00	\$44.40	
7	80	\$26.62	\$7.85	\$11.73	\$0.00	\$46.20	
8	90	\$29.95	\$7.85	\$12.02	\$0.00	\$49.82	
Notes:	Steps are 750 hrs.						
Appre	ntice to Journeyworker Ratio:1:1						
PER (BI	RUSH, REPAINT)	01/01/2017	7 \$30.60	\$7.85	\$12.30	\$0.00	\$50

**Issue Date:** 10/30/2017 Wage Request Number: 20171030-036 Page 20 of 32

**Issue Date:** 10/30/2017

Page 21 of 32

	Effecti	ive Date - 01/01/2017					Supplemental		
	Step	percent	Apprentic	ce Base Wage	Health	Pension	Unemployment	Total	Rate
	1	50		\$15.30	\$7.85	\$0.00	\$0.00	\$2	23.15
	2	55		\$16.83	\$7.85	\$1.57	\$0.00	\$2	26.25
	3	60		\$18.36	\$7.85	\$1.71	\$0.00	\$2	27.92
	4	65		\$19.89	\$7.85	\$1.85	\$0.00	\$2	29.59
	5	70		\$21.42	\$7.85	\$11.45	\$0.00	\$4	10.72
	6	75		\$22.95	\$7.85	\$11.59	\$0.00	\$4	12.39
	7	80		\$24.48	\$7.85	\$11.73	\$0.00	\$4	14.06
	8	90		\$27.54	\$7.85	\$12.02	\$0.00	\$4	17.41
	Notes:	Steps are 750 hrs.							
		ntice to Journeyworker R							
		IARKINGS (HEAVY/HIG 'Y & HIGHWAY)	HWAY)	12/01/2016	\$26.42	\$7.60	\$12.45	\$0.00	\$46.47
For apprentice	e rates see '	"Apprentice- LABORER (Heavy a	nd Highway)						
		UCKS DRIVER IL NO. 10 ZONE B		12/01/2012	\$30.28	\$9.07	\$8.00	\$0.00	\$47.35
ECK) Le driver loc	CAL 56 (ZC	NSTRUCTOR (UNDERPI ONE 3) "Apprentice- PILE DRIVER"	NNING AND	08/31/2015	\$39.00	\$9.80	\$18.17	\$0.00	\$66.97
ILE DRIVER ILE DRIVER LOG		ONE 3)		08/31/2015	\$39.00	\$9.80	\$18.17	\$0.00	\$66.97
	CAL 56 (ZC Appre	ntice - PILE DRIVER - L ive Date - 08/31/2015				\$9.80	\$18.17 Supplemental		
	CAL 56 (ZC Appre	ntice - PILE DRIVER - L		08/31/2015 ce Base Wage		\$9.80 Pension		\$0.00 Total	
	Appre Effecti	ntice - PILE DRIVER - L ive Date - 08/31/2015					Supplemental	Total	
	Appre Effecti Step 1   Notes:	ntice - PILE DRIVER - L ive Date - 08/31/2015 percent 0 Apprentice wages shall be (Same as set in Zone 1) 1\$50.05/2\$54.25/3\$58.46	Apprention no less than the follow /4\$60.56/5\$62.66/6\$6	\$0.00 \$0.00 Steps;	Health \$0.00	Pension	Supplemental Unemployment	Total	Rate
E DRIVER LOO	Appre Effecti Step 1   Notes:	ntice - PILE DRIVER - L ive Date - 08/31/2015 percent 0 Apprentice wages shall be (Same as set in Zone 1)	Apprention no less than the follow /4\$60.56/5\$62.66/6\$6	ce Base Wage \$0.00 ving Steps; 2.66/7\$66.87/8	Health \$0.00	Pension \$0.00	Supplemental Unemployment \$0.00	Total \$ 	Rate 50.00
PELAYER BORERS - ZON	Appre Effecti Step 1 Notes: Appre	ntice - PILE DRIVER - L ive Date - 08/31/2015 percent  0  Apprentice wages shall be (Same as set in Zone 1) 1\$50.05/2\$54.25/3\$58.46 intice to Journeyworker R	Apprention no less than the follow /4\$60.56/5\$62.66/6\$6	\$0.00 \$0.00 Steps;	Health \$0.00	Pension	Supplemental Unemployment	Total	Rate 50.00
PELAYER BORERS - ZON For apprentice	Appre Effecti Step 1 Notes: Appre	ntice - PILE DRIVER - L ive Date - 08/31/2015 percent  0  Apprentice wages shall be (Same as set in Zone 1) 1\$50.05/2\$54.25/3\$58.46 intice to Journeyworker R  DING & SITE) "Apprentice- LABORER" & HIGHWAY)	Apprention no less than the follow /4\$60.56/5\$62.66/6\$6	ce Base Wage \$0.00 ving Steps; 2.66/7\$66.87/8	Health \$0.00 \$66.87 \$25.75	Pension \$0.00	Supplemental Unemployment \$0.00	Total \$ 	Rate
PELAYER BORERS - ZON. For apprentice PELAYER (1)	Appre Effecti Step  1  Notes:  Appre  ### Appre  ### ### ### ### ### ### ### ### ### #	ntice - PILE DRIVER - L ive Date - 08/31/2015 percent  0  Apprentice wages shall be (Same as set in Zone 1) 1\$50.05/2\$54.25/3\$58.46 intice to Journeyworker R  DING & SITE) "Apprentice- LABORER"  & HIGHWAY) Y & HIGHWAY)	Apprention	ce Base Wage \$0.00 ving Steps; 2.66/7\$66.87/8	Health \$0.00 \$66.87 \$25.75	Pension \$0.00  \$7.60	Supplemental Unemployment \$0.00	Total \$ \$ \$ 0.00	Rate \$0.00
PELAYER BORERS - ZON. For apprentice PELAYER (1) BORERS - ZON. For apprentice	Appre Effecti Step 1 Notes: Appre HE 4 (BUIL) e rates see HEAVY HE 4 (HEAV	ntice - PILE DRIVER - L ive Date - 08/31/2015 percent  0  Apprentice wages shall be (Same as set in Zone 1) 1\$50.05/2\$54.25/3\$58.46 intice to Journeyworker R  DING & SITE)  "Apprentice- LABORER"  & HIGHWAY)  "Apprentice- LABORER (Heavy a	Apprention	ce Base Wage \$0.00 ving Steps; 2.66/7\$66.87/8 12/01/2016	Health \$0.00 \$66.87 \$25.75	Pension \$0.00 \$7.60	Supplemental Unemployment \$0.00 \$11.10	Total \$ \$0.00	Rate \$0.00 \$44.45 \$46.72
PELAYER BORERS - ZON For apprentice PELAYER () BORERS - ZON For apprentice	Appre Effecti Step 1 Notes: Appre HEAVY HEAVY E 4 (HEAV PIPEFIT	ntice - PILE DRIVER - L ive Date - 08/31/2015 percent  0  Apprentice wages shall be (Same as set in Zone 1) 1\$50.05/2\$54.25/3\$58.46 intice to Journeyworker R  DING & SITE)  "Apprentice- LABORER"  & HIGHWAY)  "Apprentice- LABORER (Heavy a	Apprentice no less than the follow 1/4\$60.56/5\$62.66/6\$6 atio:1:3	ce Base Wage \$0.00 ving Steps; 2.66/7\$66.87/8 12/01/2016 12/01/2017	Health \$0.00  \$66.87  \$25.75  \$26.67	Pension \$0.00 	\$11.10 \$12.45	Total \$	Rate \$0.00 \$44.45 \$46.72
PELAYER BORERS - ZON For apprentice PELAYER () BORERS - ZON For apprentice	Appre Effecti Step 1 Notes: Appre HEAVY HEAVY E 4 (HEAV PIPEFIT	ntice - PILE DRIVER - L ive Date - 08/31/2015 percent  0  Apprentice wages shall be (Same as set in Zone 1) 1\$50.05/2\$54.25/3\$58.46 intice to Journeyworker R  DING & SITE) "Apprentice- LABORER"  & HIGHWAY) "Apprentice- LABORER (Heavy a	Apprentice no less than the follow 1/4\$60.56/5\$62.66/6\$6 atio:1:3	2.66/7\$66.87/8 12/01/2016 09/17/2017 03/17/2018	Health \$0.00 \$66.87 \$25.75 \$26.67 \$38.03 \$39.08	Pension \$0.00 \$7.60 \$7.60 \$8.50 \$8.50	\$11.10 \$12.45 \$15.30 \$15.30	Total \$	Rate \$0.00 \$44.45 \$46.72 \$61.83 \$62.88
PELAYER BORERS - ZON. For apprentice PELAYER (BORERS - ZON. For apprentice	Appre Effecti Step 1 Notes: Appre HEAVY HEAVY E 4 (HEAV PIPEFIT	ntice - PILE DRIVER - L ive Date - 08/31/2015 percent  0  Apprentice wages shall be (Same as set in Zone 1) 1\$50.05/2\$54.25/3\$58.46 intice to Journeyworker R  DING & SITE) "Apprentice- LABORER"  & HIGHWAY) "Apprentice- LABORER (Heavy a	Apprentice no less than the follow 1/4\$60.56/5\$62.66/6\$6 atio:1:3	ce Base Wage \$0.00 ving Steps; 2.66/7\$66.87/8 12/01/2016 12/01/2017	Health \$0.00  \$66.87  \$25.75  \$26.67  \$38.03 \$39.08 \$40.33	Pension \$0.00 	\$11.10 \$12.45	Total \$	Rate \$0.00 \$44.45 \$46.72

Wage Request Number:

20171030-036

**Total Rate** 

**Apprentice -** PLUMBER/PIPEFITTER - Local 104 Western

Ef	ffective Date -	09/17/2017				Supplemental		
St	ep percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	45		\$17.11	\$8.50	\$9.05	\$0.00	\$34.66	
2	50		\$19.02	\$8.50	\$9.05	\$0.00	\$36.57	
3	55		\$20.92	\$8.50	\$9.05	\$0.00	\$38.47	
4	60		\$22.82	\$8.50	\$9.05	\$0.00	\$40.37	
5	65		\$24.72	\$8.50	\$9.05	\$0.00	\$42.27	
6	70		\$26.62	\$8.50	\$9.05	\$0.00	\$44.17	
7	75		\$28.52	\$8.50	\$9.05	\$0.00	\$46.07	
8	80		\$30.42	\$8.50	\$9.05	\$0.00	\$47.97	
9	80		\$30.42	\$8.50	\$15.30	\$0.00	\$54.22	
10	0 80		\$30.42	\$8.50	\$15.30	\$0.00	\$54.22	
Ef	ffective Date -	03/17/2018				Supplemental		
St	ep percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	45		\$17.59	\$8.50	\$9.05	\$0.00	\$35.14	
2	50		\$19.54	\$8.50	\$9.05	\$0.00	\$37.09	
3	55		\$21.49	\$8.50	\$9.05	\$0.00	\$39.04	
4	60		\$23.45	\$8.50	\$9.05	\$0.00	\$41.00	
5	65		\$25.40	\$8.50	\$9.05	\$0.00	\$42.95	
6	70		\$27.36	\$8.50	\$9.05	\$0.00	\$44.91	
7	75		\$29.31	\$8.50	\$9.05	\$0.00	\$46.86	
8	80		\$31.26	\$8.50	\$9.05	\$0.00	\$48.81	
9	80		\$31.26	\$8.50	\$15.30	\$0.00	\$55.06	
10	0 80		\$31.26	\$8.50	\$15.30	\$0.00	\$55.06	
No	otes: **1:1,2:5	5,3:9,4:12						
A	pprentice to J	ourneyworker Ratio:**						
PNEUMATIC CON	NTROLS (TE	MP.)	09/17/2017	7 \$38.03	\$8.50	\$15.30	\$0.00	\$61.83
PLUMBERS & PIPEFIT	TTERS LOCAL 10-	4 WESTERN DIVISION	03/17/2018	3 \$39.08	\$8.50	\$15.30	\$0.00	\$62.88
			09/17/2018	\$40.33	\$8.50	\$15.30	\$0.00	\$64.13
For apprentice rates	s see "Apprentice-	PIPEFITTER" or "PLUMBER/PIPE	03/17/2019 FITTER"	\$41.58	\$8.50	\$15.30	\$0.00	\$65.38
PNEUMATIC DRI	•••	PERATOR (HEAVY &	12/01/2016	5 \$26.67	\$7.60	\$12.45	\$0.00	\$46.72
HIGHWAY)  LABORERS - ZONE 4 (I		VAY) LABORER (Heavy and Highway)						
POWDERMAN & LABORERS - ZONE 4 (I		E)	12/01/2016	\$26.50	\$7.60	\$11.10	\$0.00	\$45.20
For apprentice rates	s see "Apprentice-	LABORER"						
POWDERMAN & LABORERS - ZONE 4 (I		IEAVY & HIGHWAY)	12/01/2016	5 \$27.42	\$7.60	\$12.45	\$0.00	\$47.47
*		LABORER (Heavy and Highway)						
Issue Date: 10/3	0/2017	Wage Reque	est Number: 2017103	30-036			P	age 22 of 3

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PUMP OPERATOR (CONCRETE)	06/01/2017	\$33.88	\$10.79	\$12.75	\$0.00	\$57.42
OPERATING ENGINEERS LOCAL 98	12/01/2017	\$34.48	\$10.79	\$13.02	\$0.00	\$58.29
	06/01/2018	\$35.09	\$10.79	\$13.29	\$0.00	\$59.17
	12/01/2018	\$35.69	\$10.79	\$13.56	\$0.00	\$60.04
	06/01/2019	\$36.20	\$10.79	\$13.83	\$0.00	\$60.82
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2019	\$36.80	\$10.79	\$14.10	\$0.00	\$61.69
PUMP OPERATOR (DEWATERING, OTHER)	06/01/2017	\$33.35	\$10.79	\$12.75	\$0.00	\$56.89
OPERATING ENGINEERS LOCAL 98	12/01/2017	\$33.95	\$10.79	\$13.02	\$0.00	\$57.76
	06/01/2018	\$34.56	\$10.79	\$13.29	\$0.00	\$58.64
	12/01/2018	\$35.16	\$10.79	\$13.56	\$0.00	\$59.51
	06/01/2019	\$35.67	\$10.79	\$13.83	\$0.00	\$60.29
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2019	\$36.27	\$10.79	\$14.10	\$0.00	\$61.16
READY-MIX CONCRETE DRIVER TEAMSTERS LOCAL 404	05/01/2016	\$21.01	\$10.23	\$9.40	\$0.00	\$40.64
RESIDENTIAL WOOD FRAME CARPENTER **	10/01/2017	\$22.63	\$7.07	\$7.18	\$0.00	\$36.88
** The Residential Wood Frame Carpenter classification applies	04/01/2018	\$23.01	\$7.07	\$7.18	\$0.00	\$37.26
only to the construction of new, wood frame residences that do not exceed four stories including the basement.	10/01/2018	\$23.39	\$7.07	\$7.18	\$0.00	\$37.64
LOCAL 108 - BERKSHIRE COUNTY	04/01/2019	\$23.78	\$7.07	\$7.18	\$0.00	\$38.03
A - CO/1/00 Commutation of the control of the contr	10/01/2019	\$24.17	\$7.07	\$7.18	\$0.00	\$38.42

 $As of 9/1/09 \ Carpentry \ work \ on \ wood-frame \ residential \ WEATHERIZATION \ projects \ shall \ be \ paid \ the \ RESIDENTIAL \ WOOD \ FRAME \ CARPENTER \ rate.$ 

 Issue Date:
 10/30/2017
 Wage Request Number:
 20171030-036
 Page 23 of 32

**Total Rate** 

**Apprentice -** CARPENTER (Residential Wood Frame) - Local 108 Berkshire

Pension

	Effect	ive Date - 10/01/2017				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rat	e
	1	60	\$13.58	\$7.07	\$0.00	\$0.00	\$20.6	5
	2	60	\$13.58	\$7.07	\$0.00	\$0.00	\$20.6	5
	3	65	\$14.71	\$7.07	\$7.18	\$0.00	\$28.9	6
	4	70	\$15.84	\$7.07	\$7.18	\$0.00	\$30.0	9
	5	75	\$16.97	\$7.07	\$7.18	\$0.00	\$31.2	2
	6	80	\$18.10	\$7.07	\$7.18	\$0.00	\$32.3	5
	7	85	\$19.24	\$7.07	\$7.18	\$0.00	\$33.4	9
	8	90	\$20.37	\$7.07	\$7.18	\$0.00	\$34.6	2
	Effect	ive Date - 04/01/2018				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rat	e
	1	60	\$13.81	\$7.07	\$0.00	\$0.00	\$20.8	8
	2	60	\$13.81	\$7.07	\$0.00	\$0.00	\$20.8	8
	3	65	\$14.96	\$7.07	\$7.18	\$0.00	\$29.2	1
	4	70	\$16.11	\$7.07	\$7.18	\$0.00	\$30.3	6
	5	75	\$17.26	\$7.07	\$7.18	\$0.00	\$31.5	1
	6	80	\$18.41	\$7.07	\$7.18	\$0.00	\$32.6	6
	7	85	\$19.56	\$7.07	\$7.18	\$0.00	\$33.8	1
	8	90	\$20.71	\$7.07	\$7.18	\$0.00	\$34.9	6
	Notes:	** 1: 1-5, 2: 6-8, 3: 9-11						
	Appre	entice to Journeyworker Ratio:**						
RIDE-ON MC Laborers - zol		D BUGGY OPERATOR DING & SITE)	12/01/2016	\$25.75	\$7.60	\$11.10	\$0.00	\$44.45
For apprentic	ce rates see	"Apprentice- LABORER"						
ROLLER OP			06/01/2017	\$32.74	\$10.79	\$12.75	\$0.00	\$56.28
OPERATING EN	JINEEKS L	OCAL 90	12/01/2017	\$33.34	\$10.79	\$13.02	\$0.00	\$57.15
			06/01/2018	\$33.95	\$10.79	\$13.29	\$0.00	\$58.03
			12/01/2018	\$34.55	\$10.79	\$13.56	\$0.00	\$58.90
			06/01/2019	\$35.06	\$10.79	\$13.83	\$0.00	\$59.68
For apprentic	ce rates see	"Apprentice- OPERATING ENGINEERS"	12/01/2019	\$35.66	\$10.79	\$14.10	\$0.00	\$60.55
ROOFER (Co		**	07/16/2017	\$32.25	\$10.00	\$13.91	\$0.00	\$56.16
ROOFERS LOCA	_		07/16/2018			\$14.01	\$0.00	\$57.66
			07/16/2019			\$14.11	\$0.00	\$59.41
For apprentic	e rates see	"Apprentice- ROOFER"	27, 20, 2017	422.20	\$10.00			<i>427.11</i>
		Waterproofing &Roofer Damproofg)	07/16/2017	\$31.75	\$10.00	\$13.41	\$0.00	\$55.16
	L 248		07/16/2018	\$33.15	\$10.00	\$13.51	\$0.00	\$56.66
ROOFERS LOCA			07/10/2016	Ψ55.15	Φ10.00	4		φε σ.σσ

oplemental Total Rate

	Step	ive <b>Date</b> - 07/16/2017 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	60	\$19.05	\$10.00	\$0.00	\$0.00	\$29.05	
	2	65	\$20.64	\$10.00	\$13.41	\$0.00	\$44.05	
	3	70	\$22.23	\$10.00	\$13.41	\$0.00	\$45.64	
	4	75	\$23.81	\$10.00	\$13.41	\$0.00	\$47.22	
	5	80	\$25.40	\$10.00	\$13.41	\$0.00	\$48.81	
	6	85	\$26.99	\$10.00	\$13.41	\$0.00	\$50.40	
	7	90	\$28.58	\$10.00	\$13.41	\$0.00	\$51.99	
	8	95	\$30.16	\$10.00	\$13.41	\$0.00	\$53.57	
	Effecti	ive Date - 07/16/2018				Supplemental		
	Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	1	60	\$19.89	\$10.00	\$0.00	\$0.00	\$29.89	
	2	65	\$21.55	\$10.00	\$13.51	\$0.00	\$45.06	
	3	70	\$23.21	\$10.00	\$13.51	\$0.00	\$46.72	
	4	75	\$24.86	\$10.00	\$13.51	\$0.00	\$48.37	
	5	80	\$26.52	\$10.00	\$13.51	\$0.00	\$50.03	
	6	85	\$28.18	\$10.00	\$13.51	\$0.00	\$51.69	
	7	90	\$29.84	\$10.00	\$13.51	\$0.00	\$53.35	
	8	95	\$31.49	\$10.00	\$13.51	\$0.00	\$55.00	
	Notes:	Steps are 750 hrs.Roofer(Tear Off						
OFFR GLAS		<u> </u>						
OFER SLA OFERS LOCAL		E / PRECAST CONCRETE	07/16/2017			\$13.91	\$0.00	\$56.16
			07/16/2018			\$14.01	\$0.00	\$57.66
For apprentice	rates see '	'Apprentice- ROOFER"	07/16/2019	9 \$35.30	\$10.00	\$14.11	\$0.00	\$59.41
RAPER			06/01/2017	7 \$33.35	\$10.79	\$12.75	\$0.00	\$56.89
ERATING ENGI	NEERS L	OCAL 98	12/01/2017			\$13.02	\$0.00	\$57.76
			06/01/2018			\$13.02	\$0.00	\$58.64
			12/01/2018			\$13.56	\$0.00	\$59.51
			06/01/2019			\$13.83	\$0.00	\$60.29
			12/01/2019			\$14.10	\$0.00	\$61.16
For apprentice	rates see '	'Apprentice- OPERATING ENGINEERS"	12,01,201,	ψ30.27	Ψ10.75	******	<b>40.00</b>	ψ01.10
	ED ROI	LERS AND COMPACTORS	06/01/2017	7 \$32.74	\$10.79	\$12.75	\$0.00	\$56.28
MPERS) Rating engi	INEERSIA	OCAL 98	12/01/2017	7 \$33.34	\$10.79	\$13.02	\$0.00	\$57.15
	.v.eno E(	JC111 70	06/01/2018	3 \$33.95	\$10.79	\$13.29	\$0.00	\$58.03
KATING ENGI			12/01/2018			\$13.56	\$0.00	\$58.90
KATING ENGI								
KATIIVO EIVOI			06/01/2019	9 \$35.06	\$10.79	\$13.83	\$0.00	\$59.68

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
SELF-PROPELLED POWER BROOM	06/01/2017	\$30.12	\$10.79	\$12.75	\$0.00	\$53.66
OPERATING ENGINEERS LOCAL 98	12/01/2017	\$30.72	\$10.79	\$13.02	\$0.00	\$54.53
	06/01/2018	\$31.33	\$10.79	\$13.29	\$0.00	\$55.41
	12/01/2018	\$31.93	\$10.79	\$13.56	\$0.00	\$56.28
	06/01/2019	\$32.44	\$10.79	\$13.83	\$0.00	\$57.06
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2019	\$33.04	\$10.79	\$14.10	\$0.00	\$57.93
SHEETMETAL WORKER	07/01/2017	\$32.24	\$10.64	\$16.22	\$1.77	\$60.87
SHEETMETAL WORKERS LOCAL 63	01/01/2018	\$32.99	\$10.64	\$16.22	\$1.77	\$61.62
	07/01/2018	\$33.74	\$10.64	\$16.22	\$1.77	\$62.37
	01/01/2019	\$34.74	\$10.64	\$16.22	\$1.77	\$63.37
	07/01/2019	\$35.74	\$10.64	\$16.22	\$1.77	\$64.37
	01/01/2020	\$36.99	\$10.64	\$16.22	\$1.77	\$65.62

**Apprentice -** SHEET METAL WORKER - Local 63

iffecti tep	ive Date - percent	07/01/2017	Apprentice Base Wag	e Health	Pension	Supplemental Unemployment	Total Rate
l	45		\$14.51	\$6.21	\$4.67	\$0.00	\$25.39
2	50		\$16.12	\$6.55	\$5.19	\$0.00	\$27.86
3	55		\$17.73	\$6.88	\$9.33	\$1.02	\$34.96
1	60		\$19.34	\$7.22	\$9.33	\$1.08	\$36.97
5	65		\$20.96	\$7.55	\$9.33	\$1.14	\$38.98
5	70		\$22.57	\$7.88	\$9.33	\$1.19	\$40.97
7	75		\$24.18	\$8.22	\$9.33	\$1.25	\$42.98
3	80		\$25.79	\$9.30	\$15.18	\$1.51	\$51.78
)	85		\$27.40	\$9.64	\$15.18	\$1.57	\$53.79
10	90		\$29.02	\$9.98	\$15.18	\$1.63	\$55.81
ffecti	ive Date -	01/01/2018				Supplemental	
tep	percent		Apprentice Base Wag	e Health	Pension	Unemployment	Total Rate
l	45		\$14.85	\$6.21	\$4.67	\$0.00	\$25.73
2	50		\$16.50	\$6.55	\$5.19	\$0.00	\$28.24
3	55		\$18.14	\$6.88	\$9.33	\$1.03	\$35.38
1	60		\$19.79	\$7.22	\$9.33	\$1.09	\$37.43
5	65		\$21.44	\$7.55	\$9.33	\$1.15	\$39.47
5	70		\$23.09	\$7.88	\$9.33	\$1.21	\$41.51
7	75		\$24.74	\$8.22	\$9.33	\$1.27	\$43.56
3	80		\$26.39	\$9.30	\$15.18	\$1.53	\$52.40
)	85		\$28.04	\$9.64	\$15.18	\$1.59	\$54.45
10	90		\$29.69	\$9.98	\$15.18	\$1.65	\$56.50
otes:							

Apprentice to Journeyworker Ratio:1:3

 Issue Date:
 10/30/2017
 Wage Request Number:
 20171030-036
 Page 26 of 32

Classification	<b>Effective Date</b>	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
SIGN ERECTOR PAINTERS LOCAL 35 - ZONE 3	06/01/2013	\$25.81	\$7.07	\$7.05	\$0.00	\$39.93

	affective tep p	<b>Date -</b> 06/01/2013 ercent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rat	te
1	1 5	50	\$12.91	\$7.07	\$0.00	\$0.00	\$19.9	8
2	2 5	55	\$14.20	\$7.07	\$2.45	\$0.00	\$23.7	2
3	3 6	60	\$15.49	\$7.07	\$2.45	\$0.00	\$25.0	1
4	1 (	55	\$16.78	\$7.07	\$2.45	\$0.00	\$26.3	0
5	5 7	70	\$18.07	\$7.07	\$7.05	\$0.00	\$32.1	9
6	5 7	75	\$19.36	\$7.07	\$7.05	\$0.00	\$33.4	8
7	7 8	30	\$20.65	\$7.07	\$7.05	\$0.00	\$34.7	7
8	3 8	35	\$21.94	\$7.07	\$7.05	\$0.00	\$36.0	6
9	) 9	90	\$23.23	\$7.07	\$7.05	\$0.00	\$37.3	5
<b>N</b>	Notes:	teps are 4 mos.						
A	pprenti	ce to Journeyworker Ratio:1:1						
ECIALIZED EARTH MOVING EQUIP < 35 TONS MSTERS JOINT COUNCIL NO. 10 ZONE B		12/01/2010	5 \$32.4	\$10.91	\$10.89	\$0.00	\$54.24	
ECIALIZED EARTH MOVING EQUIP > 35 TONS  MASTERS JOINT COUNCIL NO. 10 ZONE B		12/01/2010	5 \$32.7	73 \$10.91	\$10.89	\$0.00	\$54.53	
RINKLER FITTER INKLER FITTERS LOCAL 669		04/01/2017	7 \$40.2	26 \$9.17	\$12.43	\$0.00	\$61.86	
VKLEK FII IERS	LUCAL 66	у	01/01/2018	3 \$40.2	26 \$9.67	\$12.63	\$0.00	\$62.50
			04/01/2018	3 \$41.5	\$9.67	\$12.88	\$0.00	\$64.00
			01/01/2019	9 \$41.5	\$10.02	\$13.08	\$0.00	\$64.6

**Issue Date:** 10/30/2017 Wage Request Number: 20171030-036 Page 27 of 32

**Total Rate** 

Pension

\$12.06

\$12.33

\$12.60

\$10.50

\$10.75

\$1.00

\$0.00

\$0.00

\$0.00

\$64.47

\$65.74

\$57.01

12/30/2018

06/30/2019

12/29/2019

\$41.91

\$42.66

\$43.41

Pension

Apprentice -	TELECOMMUNICATION TECHNICIAN - Local 7
Effortive Date	07/02/2017

Effecti	ve Date - 07/02/2017				Supplemental	
Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	40	\$16.00	\$5.25	\$0.48	\$0.00	\$21.73
2	45	\$18.00	\$5.25	\$0.54	\$0.00	\$23.79
3	50	\$20.01	\$9.60	\$6.90	\$0.00	\$36.51
4	55	\$22.01	\$9.60	\$6.96	\$0.00	\$38.57
5	65	\$26.01	\$9.60	\$8.08	\$0.00	\$43.69
6	70	\$28.01	\$9.60	\$9.14	\$0.00	\$46.75
<b>Effecti</b> Step	ve Date - 12/31/2017 percent	Apprentice Base Wage	Haalth	Pension	Supplemental Unemployment	Total Rate
	*					
1	40	\$16.20	\$5.40	\$0.49	\$0.00	\$22.09
2	45	\$18.23	\$5.40	\$0.55	\$0.00	\$24.18
3	50	\$20.26	\$10.00	\$6.91	\$0.00	\$37.17
4	55	\$22.28	\$10.00	\$6.97	\$0.00	\$39.25
5	65	\$26.33	\$10.00	\$8.09	\$0.00	\$44.42
6	70	\$28.36	\$10.00	\$9.15	\$0.00	\$47.51
Notes:						
į	Steps are 800 hours					
Appre	ntice to Journeyworker Ratio:1:	1				
ERRAZZO FINISHE	S NATE A THE	08/01/2017	7 \$51.	00 \$10.75	\$19.35	\$0.00 \$81.10

DRIGHT AVERGIAGATI 2 (CDD /DITT) 14 ADDIE 6 THE	06/01/2017	\$51.00	\$10.75	Ψ17.55	Ψ0.00	\$61.10
BRICKLAYERS LOCAL 3 (SPR/PITT) - MARBLE & TILE	02/01/2018	\$51.68	\$10.75	\$19.35	\$0.00	\$81.78
	08/01/2018	\$53.03	\$10.75	\$19.48	\$0.00	\$83.26
	02/01/2019	\$53.67	\$10.75	\$19.48	\$0.00	\$83.90
	08/01/2019	\$55.02	\$10.75	\$19.62	\$0.00	\$85.39
	02/01/2020	\$55.66	\$10.75	\$19.62	\$0.00	\$86.03
	08/01/2020	\$57.01	\$10.75	\$19.77	\$0.00	\$87.53
	02/01/2021	\$57.65	\$10.75	\$19.77	\$0.00	\$88.17
	08/01/2021	\$59.05	\$10.75	\$19.93	\$0.00	\$89.73
	02/01/2022	\$59.64	\$10.75	\$19.93	\$0.00	\$90.32

Wage Request Number: 20171030-036 **Issue Date:** 10/30/2017 Page 29 of 32

	Step	ve Date - 08/01/2017 percent	Apprentice	Base Wage	Health	Pension	Supplemental Unemployment	Total	Rate
	1	50	\$	325.50	\$10.75	\$19.35	\$0.00	\$5	55.60
	2	60	\$	30.60	\$10.75	\$19.35	\$0.00	\$6	60.70
	3	70	\$	335.70	\$10.75	\$19.35	\$0.00	\$6	65.80
	4	80	\$	540.80	\$10.75	\$19.35	\$0.00	\$7	70.90
	5	90	\$	345.90	\$10.75	\$19.35	\$0.00	\$7	76.00
	Effecti	ve Date - 02/01/2018					Supplemental		
	Step	percent	Apprentice	Base Wage	Health	Pension	Unemployment	Total	Rate
	1	50	\$	325.84	\$10.75	\$19.35	\$0.00	\$3	55.94
	2	60	\$	31.01	\$10.75	\$19.35	\$0.00	\$6	61.11
	3	70	\$	36.18	\$10.75	\$19.35	\$0.00	\$6	66.28
	4	80	\$	341.34	\$10.75	\$19.35	\$0.00	\$7	71.44
	5	90	\$	346.51	\$10.75	\$19.35	\$0.00	\$7	76.61
	Notes:								
		ntice to Journeyworker	Ratio:1:5						
EST BORING BORERS - FOUN				12/01/2016	\$37.70	\$7.60	\$14.35	\$0.00	\$59.65
For apprentice	ates see "	Apprentice- LABORER"							
EST BORING ABORERS - FOUN				12/01/2016	\$36.42	2 \$7.60	\$14.35	\$0.00	\$58.37
For apprentice	ates see "	Apprentice- LABORER"							
EST BORING BORERS - FOUN				12/01/2016	\$36.30	\$7.60	\$14.35	\$0.00	\$58.25
For apprentice	ates see "	Apprentice- LABORER"							
RACTORS				06/01/2017	\$32.74	\$10.79	\$12.75	\$0.00	\$56.28
PERATING ENGI	VEERS LC	OCAL 98		12/01/2017	\$33.34	\$10.79	\$13.02	\$0.00	\$57.15
				06/01/2018	\$33.95	\$10.79	\$13.29	\$0.00	\$58.03
				12/01/2018	\$34.55	\$10.79	\$13.56	\$0.00	\$58.90
				06/01/2019	\$35.00	\$10.79	\$13.83	\$0.00	\$59.68
				12/01/2019	\$35.60	\$10.79	\$14.10	\$0.00	\$60.55
For apprentice	rates see "	Apprentice- OPERATING EN	GINEERS"						
		TH MOVING EQUIPME TL NO. 10 ZONE B	NT	12/01/2016	\$33.02	\$10.91	\$10.89	\$0.00	\$54.82
UNNEL WOR		MPRESSED AIR		12/01/2016	5 \$48.58	3 \$7.60	\$14.75	\$0.00	\$70.93
For apprentice	rates see "	Apprentice- LABORER"							
UNNEL WOR		MPRESSED AIR (HAZ	WASTE)	12/01/2016	5 \$50.58	3 \$7.60	\$14.75	\$0.00	\$72.93
For apprentice	rates see "	Apprentice- LABORER"							
UNNEL WOR				12/01/2016	\$40.65	5 \$7.60	\$14.75	\$0.00	\$63.00
	nton non !!	Apprentice- LABORER"							

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TUNNEL WORK - FREE AIR (HAZ. WASTE) LABORERS (FREE AIR TUNNEL)	12/01/2016	\$42.65	\$7.60	\$14.75	\$0.00	\$65.00
For apprentice rates see "Apprentice- LABORER"						
VAC-HAUL TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/01/2016	\$32.44	\$10.91	\$10.89	\$0.00	\$54.24
WAGON DRILL OPERATOR (HEAVY & HIGHWAY)  LABORERS - ZONE 4 (HEAVY & HIGHWAY)	12/01/2016	\$26.67	\$7.60	\$12.45	\$0.00	\$46.72
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
WATER METER INSTALLER	09/17/2017	\$38.03	\$8.50	\$15.30	\$0.00	\$61.83
PLUMBERS & PIPEFITTERS LOCAL 104 WESTERN DIVISION	03/17/2018	\$39.08	\$8.50	\$15.30	\$0.00	\$62.88
	09/17/2018	\$40.33	\$8.50	\$15.30	\$0.00	\$64.13
	03/17/2019	\$41.58	\$8.50	\$15.30	\$0.00	\$65.38
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER  Outside Electrical - West  EQUIPMENT OPERATOR	08/30/2015	\$42.16	\$8.20	\$9.26	\$0.00	\$59.62
OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42	00/30/2013	ψ12.10	ψ0.20	***	4	ψυγ.02
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42	08/30/2015	\$28.87	\$8.20	\$8.87	\$0.00	\$45.94
For apprentice rates see "Apprentice- LINEMAN"						
GROUNDMAN / TRUCK DRIVER OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42	08/30/2015	\$37.73	\$8.20	\$9.13	\$0.00	\$55.06
For apprentice rates see "Apprentice- LINEMAN"						
HEAVY EQUIPMENT OPERATOR OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42	08/30/2015	\$44.37	\$8.20	\$9.33	\$0.00	\$61.90
For apprentice rates see "Apprentice- LINEMAN"						
JOURNEYMAN LINEMAN OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42	08/30/2015	\$48.80	\$8.20	\$9.46	\$0.00	\$66.46

Step	ive Date - 08/30/2015 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
ыср	percent	Appletitiee Base wage	Ticaitii	1 Chiston	Спетрюутен	Total Rate
1	60	\$29.28	\$8.20	\$0.88	\$0.00	\$38.36
2	65	\$31.72	\$8.20	\$0.95	\$0.00	\$40.87
3	70	\$34.16	\$8.20	\$9.02	\$0.00	\$51.38
4	75	\$36.60	\$8.20	\$9.10	\$0.00	\$53.90
5	80	\$39.04	\$8.20	\$9.17	\$0.00	\$56.41
6	85	\$41.48	\$8.20	\$9.24	\$0.00	\$58.92
7	90	\$43.92	\$8.20	\$9.32	\$0.00	\$61.44

**Apprentice -** LINEMAN (Outside Electrical) - West Local 42

Apprentice to Journeyworker Ratio:1:2						
TELEDATA CABLE SPLICER OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42	01/01/2016	\$28.98	\$4.25	\$3.12	\$0.00	\$36.35
TELEDATA LINEMAN/EQUIPMENT OPERATOR  OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42	01/01/2016	\$27.31	\$4.25	\$3.07	\$0.00	\$34.63

 Issue Date:
 10/30/2017
 Wage Request Number:
 20171030-036
 Page 31 of 32

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TELEDATA WIREMAN/INSTALLER/TECHNICIAN OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42	01/01/2016	\$27.31	\$4.25	\$3.07	\$0.00	\$34.63
TRACTOR-TRAILER DRIVER OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42	08/30/2015	\$42.16	\$8.20	\$9.26	\$0.00	\$59.62
TREE TRIMMER OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42	01/31/2016	\$18.51	\$3.55	\$0.00	\$0.00	\$22.06
This classification applies only to tree work done: (a) for a utility company, R.E.A. cooperating, maintaining, or repairing the utility company's equipment, and (c) by a personal classification does not apply to wholesale tree removal.	•	-				
TREE TRIMMER GROUNDMAN OUTSIDE ELECTRICAL WORKERS - WEST LOCAL 42	01/31/2016	\$16.32	\$3.55	\$0.00	\$0.00	\$19.87

This classification applies only to tree work done: (a) for a utility company, R.E.A. cooperative, or railroad or coal mining company, and (b) for the purpose of operating, maintaining, or repairing the utility company's equipment, and (c) by a person who is using hand or mechanical cutting methods and is on the ground. This classification does not apply to wholesale tree removal.

#### Additional Apprentice Information:

Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the pre-determined hourly wage rate established by the Commissioner under the provisions of the M.G.L. c. 149, ss. 26-27D. Apprentice ratios are established by the Division of Apprenticeship Training pursuant to M.G.L. c. 23, ss. 11E-11L.

All apprentices must be registered with the Division of Apprenticeship Training in accordance with M.G.L. c. 23, ss. 11E-11L.

All steps are six months (1000 hours.)

Ratios are expressed in allowable number of apprentices to journeymen or fraction thereof, unless otherwise specified.

- \*\* Multiple ratios are listed in the comment field.
- \*\*\* APP to JM; 1:1, 2:2, 2:3, 3:4, 4:4, 4:5, 4:6, 5:7, 6:7, 6:8, 6:9, 7:10, 8:10, 8:11, 8:12, 9:13, 10:13, 10:14, etc.
- \*\*\*\* APP to JM; 1:1, 1:2, 2:3, 2:4, 3:5, 4:6, 4:7, 5:8, 6:9, 6:10, 7:11, 8:12, 8:13, 9:14, 10:15, 10:16, etc.

**Issue Date:** 10/30/2017 **Wage Request Number:** 20171030-036 **Page 32 of 32** 

#### TOWN OF EGREMONT BID RESPONSE

(Bidder)		-		
(By)				
(Title)		-		
This bid must bear the written signat corporation or a partnership, the bid partner and the title of such officer mart of submission of this proposal and the submission of this proposal and the submission of the proposal and the submission of the	must be signed boust be stated. Sa	y a duly authorized	d officer of such	corporation, or by a
Address at which bidder can be contacted:				
Telephone number at which bidder can be contacted:				
Date:				
(Seal – if Bid is by a corporation)				
Attest:				-

The Town of EGREMONT reserves the right to accept or reject any or all bids if it is in the Town's best interest and to waive any informality in the bids received.

Bidders must submit the following with their bids:

- 1. Contractor's Bid Form
- 2. Bid proposal
- 3. Unit Prices Form: Section 00432
- 4. Alternates Form: Section 00433
- 5. OSHA Certification
- 2. Form of non-collusion affidavit
- 3. Certificate as to corporate bidder
- 4. Certificate as to payment of state taxes
- 5. Bidder's Certification Regarding Prevailing Wage Rates
- 6. Certificate of Debarment
- 7. Certificate of Foreign Corporation (if applicable)
- 8. Bid Bond
- 9. Three References for M.G.L. Ch. 149 Construction Contracts
- 10. DCAM Certificate

(Failure to submit any of the above will cause rejection of the bid proposal)

#### CONTRACTOR BID PROPOSAL

"The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals."

Individual or Corporate Name of Bidder	
Signature of Authorized Agent	
Printed Name of Authorized Agent	_
Date	-
·	
Project Name	
Base Bid Amount (\$) and with words	
Alternate One: ADA Improvements (\$) and with	h words

# **DOCUMENT 00432**

#### **UNIT PRICES FORM**

1.1	BID INFORMATION
A.	Bidder:
B.	Project Name: South Egremont Village School Foundation Stabilization.
C.	Project Location: 42 Main Street, South Egremont, MA.
D.	Owner: Town of Egremont.
Е.	Architect: Evelyn Cole Smith Architects, LLC.
1.2	BID FORM SUPPLEMENT
A.	This form is required to be attached to the Bid Form.
B.	The undersigned Bidder proposes the amounts below be added to or deducted from the Contract Sum on performance and measurement of the individual items of Work.
C.	If the unit price does not affect the Work of this Contract, the Bidder shall indicate "NO APPLICABLE."
1.3	UNIT PRICES
A.	Unit-Price No. 1: Removal of unsatisfactory soil and replacement with satisfactory soil materia
	1 Dollars (\$) per CY.
B.	Unit-Price No. 2: Rock excavation and replacement with satisfactory soil material.
	1 Dollars (\$) per CY.
C.	Unit-Price No. 3: Timber sill replacement including connectors.
	1 Dollars (\$) per LF.
D.	Unit-Price No. 4: Timber joist replacement including connectors.
	1 Dollars (\$) per LF.
E.	Unit-Price No. 5: East side temporary wood stair, landing, guard and handrails.
	1 Dollars (\$) per unit.
1.4	SUBMISSION OF BID SUPPLEMENT
A.	Respectfully submitted this day of, 2017.

В.	Submitted By:corporation).	(Insert name of bidding firm or
C.	Authorized Signature:	(Handwritten signature).
D.	Signed By:	(Type or print name).
E.	Title:	(Owner/Partner/President/Vice President).

END OF DOCUMENT 00432

# **DOCUMENT 00433**

#### **ALTERNATES FORM**

1.5	BID INFORMATION	
A.	Bidder:	
B.	Prime Contract:	
C.	Project Name: South Egremont Village School Foundation Stabilization.	
D.	Project Location: 42 Main Street, South Egremont.	
E.	Owner: Town of Egremont.	
F.	Architect: Evelyn Cole Smith Architects, LLC	
1.6	BID FORM SUPPLEMENT	
A.	This form is required to be attached to the Bid Form.	
1.7	DESCRIPTION	
A.	The undersigned Bidder proposes the amount below be added to or deducted from the Base Bid if particular alternates are accepted by Owner. Amounts listed for each alternate include costs of related coordination, modification, or adjustment.	
1.	Cost-Plus-Fee Contract: Alternate price given below includes adjustment to Contractor's Fee.	
B.	If the alternate does not affect the Contract Sum, the Bidder shall indicate "NO CHANGE."	
C.	If the alternate does not affect the Work of this Contract, the Bidder shall indicate "NOT APPLICABLE."	
D.	The Bidder shall be responsible for determining from the Contract Documents the affects of each alternate on the Contract Time and the Contract Sum.	
E.	Owner reserves the right to accept or reject any alternate, in any order, and to award amend the Contract accordingly within 60 days of the Notice of Award unless otherw indicated in the Contract Documents.	
F.	Acceptance or non-acceptance of any alternates by the Owner shall have no affect on the Contract Time unless the "Schedule of Alternates" Article below provides a formatted space for the adjustment of the Contract Time.	
1.8	SCHEDULE OF ALTERNATES	
A.	Alternate No. One: ADA Improvements.	
1.	ADD DEDUCT NO CHANGE NOT APPLICABLE	

2.		Dollars (\$).
1.9	SUBMISSION OF BID SUPPLEMENT	
A.	Respectfully submitted this day of	, 2012.
В.	Submitted By:corporation).	(Name of bidding firm or
C.	Authorized Signature:signature).	(Handwritten
D.	Signed By:	(Type or print name).
E.	Title:President).	(Owner/Partner/President/Vice

END OF DOCUMENT 00433

#### **OSHA CERTIFICATION**

The undersigned agrees that if he is selected as the contractor, he will comply with the provisions of M.G.L. Chapter 30, Section 39S.

The undersigned certifies, under penalties of perjury, that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and that all employees to be employed in the work subject to this bid have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration.

Date	
	(Name of General Bidder)
	By
	(Name of person Signing Bid and Title) Signature is required
	(Business Address)
	(City and State)
	(Telephone Number)

# **NON-COLLUSIVE AFFIDAVIT**

Commonwealth of Massachusetts	
County of	
being first duly sworn, deposes and sa	ys,
connived or agreed directly or indirect refrain from bidding, and has not in an collusion, or communication or confer other bidder, or to fix any overhead, pro other bidder, or to secure any advantage	, the party making the foregoing bid; that or a sham; that said bidder has not colluded, conspired, tly, with any bidder or person, to put in a sham bid or to my manner, directly or indirectly sought by agreement or rence, with any person, to fix the bid price of its bid or any rofit or cost element of said bid price, or of that of any ge against the Board of Selectmen, Town of Egremont, my person interested in the proposed contract, and that all
	Signature of
	Bidder, if bidder is an Individual
	Partner, if bidder is a Partnership
	Officer, if bidder is a Corporation
Subscribed and sworn to before me thi	is, 2016.
	Notary Public
My commission expires	

# CERTIFICATE AS TO CORPORATE BIDDER

Ι,	certify that I am the
	of the corporation named as bidder in the Bid
included herein; that	, who signed said Bid on behalf of the Bidder was
	said corporation; that I know his/her signature; that his/her
<u> </u>	hat said Bid was duly signed, sealed and executed for and on
behalf of said corporation by author	ority of its governing body.
	(Composeto Soci)
	(Corporate Seal)
	(Secretary – Clerk)
Dated:	
CEDTIFICATI	E AS TO PAYMENT OF STATE TAXES
CERTIFICATI	E AS TO PAYMENT OF STATE TAXES
Pursuant to M.G.L. Ch. 62C. sec.	49A, I certify under the pains and penalties of perjury that I,
	have filed all state tax returns and paid all state taxes required
under law.	
Social Security Number or	Signature of Individual
Federal Identification Number	or Corporate Name
	By:
	Corporate Officer
	(if applicable)

## BIDDER'S CERTIFICATION REGARDING PAYMENT OF PREVAILING WAGES

The undersigned bidder hereby certifies, under the pains and penalties of perjury, that the foregoing bid is based upon the payment to laborers to the employed on the project of wages in an amount no less than the applicable prevailing wage rates established for the project by the Massachusetts Department of Labor and Industries. The undersigned bidder agrees to indemnify the awarding authority for, from and against any loss, expenses, damages, action or claims, including any expense incurred in connection with any delay or stoppage of the project work, arising out of or as a result of (1) the failure of the said bid to be based upon the payment of the said applicable prevailing wage rates, or (2) the failure of the bidder, if selected as the contractor, to pay laborers employed on the project the said applicable prevailing wages.

Dated:	Name of Bidder:	
	By:	
	Name:	
	Title:	

# CERTIFICATE OF DEBARMENT

The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the commonwealth under the provisions of section twenty-nine F of chapter twenty-nine or any other applicable debarment provisions of any other chapter of the General Law or any rule or regulation promulgated hereunder M.G.L. c.149, ss. 44E (2) and 44F(2).
(Company Name)
(Signature/Title)
CERTIFICATE OF FOREIGN CORPORATION
If the Bidder is a foreign corporation, by affixing his/her signature, the Bidder certifies that the corporation is qualified under provision of MGL C181, Section 4 to do business in the Commonwealth of Massachusetts.
Company Name)
(Signature/Title)
If awarded the Contract, the Contractor shall provide with his agreement package, a certificate from the Secretary of the Commonwealth of Massachusetts that the corporation is qualified under provisions of MGL C181, Section 4, to do business in the Commonwealth.
Dated:

#### **AWARD OF CONTRACT:**

Award will be made to the lowest responsive, responsible and eligible Bidder. The party to whom the contract is awarded will be required to execute the Agreement, obtain Payment Bonds, Insurance Certificates and Certification Form, and a Certificate of Vote of authorization of signature on Documents, within ten (10) calendar days from receipt of Notice of Award. The Notice of Award shall be accompanied by the necessary Agreement and Bid Forms. In case of failure of the Bidder to execute the Agreement and provide the above mentioned Bonds, Certificates, etc., the Town of EGREMONT may at his option, consider the Bidder in default, in which case the bid security accompanying the Bid shall become property of the Town of EGREMONT.

#### **PAYMENT AND PERFORMANCE BONDS:**

A <u>Payment</u> Bond(s) in the amount of <u>one hundred percent (100%)</u> of the Contract price, with a corporate surety approved by the Town of EGREMONT will be required for the faithful performance of the Contract.

Attorneys-in-fact, who sign Bid Bonds or Payment Bond, must file with each Bond, a certified and effective dated copy of their Power of Attorney.

#### **CONTRACT INSURANCE:**

The successful bidder shall provide Commercial General Liability Insurance, Automotive Liability Insurance, Worker's Compensation and Employer's Liability Insurance, including other coverage such as indicated in the General Conditions and as amended in the Supplementary Conditions.

The successful bidder shall provide separate Town of EGREMONT 's Protective Liability Insurance with \$1 million liability and \$3 million umbrella insurance, with the Town of EGREMONT as insured. A Rider clause to the CONTRACTOR'S Liability Insurance will not be acceptable.

The Certificate of Insurance shall list the Town of EGREMONT as an additional insured.

#### **NOTICE TO PROCEED:**

The Notice to Proceed shall be issued within thirty (30) days of the effective date of the Agreement by the Town of EGREMONT. Should there be reasons why the Notice to Proceed cannot be issued within such period; the time may be extended by mutual agreement between the Town of EGREMONT and the successful bidder. If the Notice to Proceed has not been issued within the thirty (30) day period, or within the period mutually agreed upon, the successful bidder may terminate the Agreement without further liability on the part of either party.

## BIDDER QUALIFICATION FORM FOR HISTORIC PRESERVATION WORK

The bidder is required to have past experience on projects that are built according to the Secretary of the Interior's, Standards for the Treatment of Historic Properties. The contractor shall identify below, a list of at least 2 completed projects that include properties that are listed on the National Register of Historic Places. The projects must have been completed within the last 5 years.

Project 1:	
Project nam	e
Reference:	Phone:
Project 2:	
Project 2: Project nam	e
Location:	
Reference:	Phone:

Project name		
Location:		
Description:		
	Dl	
	Pnone.	
Reference.	Phone:	
Reference.		
Project 4:	rnone.	
Project 4: Project name		
Project 4: Project name  Location:		
Project 4: Project name  Location:		
Project 4: Project name  Location:		
Project 4: Project name  Location:		

# ATTACHMENT B OWNER-CONTRACTOR AGREEMENT

# **TOWN OF EGREMONT**

Contract for South Egremont Village School Foundation Stabilization
Monetary Limits: \$
DATE:
This Contract is entered into on, or as of, this date by and between the Town of Egremont, 171 Egremont Plain Road, Egremont, MA 01258 (the "Town"), and
L J
[Contact Name for Responsible Person]
[Address of the Contractor]
[Telephone Number] [FAX Number]
[email address]
1. This is a Contract for the procurement of the following: (Describe the work to be performed)
If this is a construction contract, Supplement $C$ must be completed, executed and attached hereto.

Date Modified: 9/12/2011 (BBM\_LT)

#### 2. The Contract price to be paid to the Contractor by the Town is:

#### 3. Payment will be made as follows:

- 3.1 If any portion of the contract price is to be paid by a private citizen(s) no work shall be performed until a sum has been deposited with the Town Treasurer, upon an estimate made by the board, committee or officer having charge of the work, sufficient to cover the payment for the portion of the said work chargeable to the private citizen(s).
- 3.2 Fees and Reimbursable Costs combined shall not exceed \$\_\_\_\_as more fully set forth in the Contractor Documents.
- 3.3 There shall be no further costs, fees or reimbursable charges due the Contractor under this Contract unless said fees and/or costs are so set forth in writing. The Town will not pay any surcharge or premium on top of the direct out of pocket expenses, if any.
- 3.4 Final payment including any unpaid balance of the Contractor's compensation shall be due and payable when the Project/Goods/Services is/are delivered to the Town when the project is completed and the services are complete and/or the goods are delivered and accepted.

#### 4. Security

4.1 In the event the contract price exceeds the sum of \$10,000.00, the Contractor must provide security in the form of a 100% bond or otherwise, conditioned upon the faithful performance of this Contract.

#### 5. Definitions:

- 5.1 <u>Acceptance</u>: All Contracts require proper acceptance of the described goods or services by the Town. Proper acceptance shall be understood to include inspection of goods and certification of acceptable performance for services by authorized representatives of the Town to ensure that the goods or services are complete and are as specified in the Contract.
- 5.2 <u>Contract Documents</u>: All documents relative to the Contract including (where used) Request for Proposals and all attachments thereto, Instructions to Bidders, Proposal Form, General Conditions, Supplementary General Conditions, General Specifications, Other Specifications included in Project Manual, Drawings, all Addenda issued during the bidding period and Contractor's Response to the Request for Proposal. The Contract documents are complementary, and what is called for by any one shall be as binding as if called for by all. The intention of the document is to include all labor and materials, equipment and transportation necessary for the proper performance of the Contract.

- 5.3 <u>The Contractor:</u> The "other party" to any Contract with the Town. This term shall (as the sense and particular Contract so require) include Vendor, Contractor, Engineer, or other label used to identify the other party in the particular Contract. Use of the term "Contractor" shall be understood to refer to any other such label used.
- 5.4 <u>Date of Substantial Performance:</u> The date when the work is sufficiently complete, the services are performed, or the goods delivered, in accordance with Contract documents, as modified by approved Amendments and Change Orders.
- 5.5 Goods: Goods, Supplies, Services or Materials.
- 5.6 <u>Subcontractor</u>: Those having a direct Contract with the Contractor. The term includes one who furnished material worked to a special design according to the Drawings or Specifications of this work, but does not include one who merely furnishes material not so worked.
- 5.7 Work: The services or materials contracted for, or both.

#### 6. Term of Contract and Time for Performance:

This Contract shall be fully performed by the Contractor in accordance with the provisions of the Contract Documents on or before <u>August 3, 2018</u>, unless extended, in writing, at the sole discretion of the Town, and not subject to assent by the Contractor, and subject to the availability and appropriation of funds as certified by the Town Accountant. Time is of the essence for the completion of the Contract.

#### 7. Subject to Appropriation:

Notwithstanding anything in the Contract documents to the contrary, any and all payments which the Town is required to make under this Contract shall be subject to appropriation or other availability of funds as certified by the Town Accountant. In the absence of appropriation or availability as certified herein, this Contract shall be immediately terminated without liability for damages, penalties or other charges to the Town. In the event this is a multi-year contract, this Contract shall be subject to annual appropriation and in the event funds are not so appropriated, this Contract shall terminate immediately without liability for damages, penalties or charges to the Town.

#### 8. Permits and Approvals:

Permits, Licenses, Approvals and all other legal or administrative prerequisites to its performance of the Contract shall be secured and paid for by the Contractor.

#### 9. Termination and Default:

9.1 <u>Without Cause</u>. The Town may terminate this Contract on seven (7) calendar days notice when in the Town's sole discretion it determines it is in the best interests of the Town to do so, by providing notice to the Contractor, which shall be in writing and

shall be deemed delivered and received when given in person to the Contractor, or when received by fax, express mail, certified mail return receipt requested, regular mail postage prepaid or delivered by any other appropriate method evidencing actual receipt by the Contractor. Upon termination without cause, Contractor will be paid for services rendered to the date of termination.

- 9.2 <u>For Cause.</u> If the Contractor is determined by the Town to be in default of any term or condition of this Contract, the Town may terminate this Contract on seven (7) days notice by providing notice to the Contractor, which shall be in writing and shall be deemed delivered and received when given in person to the Contractor, or when received by fax, express mail, certified mail return receipt requested, regular mail postage prepaid or delivered by any other appropriate method evidencing actual receipt by the Contractor.
- 9.3 Default. The following shall constitute events of a default under the Contract:

any material misrepresentation made by the Contractor to the Town; 2) any failure to perform any of its obligations under this Contract including, but not limited to the following: (i) failure to commence performance of this Contract at the time specified in this Contract due to a reason or circumstance within the Contractor's reasonable control, (ii) failure to perform this Contract with sufficient personnel and equipment or with sufficient material to ensure the completion of this Contract within the specified time due to a reason or circumstance within the Contractor's reasonable control, (iii) failure to perform this Contract in a manner reasonably satisfactory to the Town, (iv) failure to promptly re-perform within a reasonable time the services that were rejected by the Town as unsatisfactory, or erroneous, (v) discontinuance of the services for reasons not beyond the Contractor's reasonable control, (vi) failure to comply with a material term of this Contract, including, but not limited to, the provision of insurance and non-discrimination, (vii) any other acts specifically and expressly stated in this Contract as constituting a basis for termination of this Contact, and (viii) failure to comply with any and all requirements of state law and/or regulations, and Town bylaw and/or regulations.

#### 10. Suspension or Delay

The Town may order the Contractor, in writing, to suspend, delay or interrupt all or any part of the Services without cause for such period of time as the Town may determine to be appropriate for its convenience. In the event of any such suspension, delay or interruption, the Contractor's compensation shall be equitably adjusted. No adjustment shall be made if the Contractor is or otherwise would have been responsible for the suspension, delay or interruption of the Services, or if another provision of this Contract is applied to render an equitable adjustment.

#### 11. The Contractor's Breach and the Town's Remedies:

Failure of the Contractor to comply with any of the terms or conditions of this Contract shall be deemed a material breach of this Contract, and the Town of Egremont shall have all the rights and remedies provided in the Contract documents, the right to cancel, terminate, or suspend the Contract in whole or in part, the right to maintain any and all actions at law or in equity or other

proceedings with respect to a breach of this Contract, including "Damages" including but not limited to costs, attorney's fees or other damages resulting form said breach ("Damages") as well as specific performance, and the right to select among the remedies available to it by all of the above.

From any sums due to the Contractor for services, the Town may keep the whole or any part of the amount for expenses, losses and Damages incurred by the Town as a consequence of procuring services as a result of any failure, omission or mistake of the Contractor in providing services as provided in this Contract.

#### 12. Statutory Compliance:

12.1 This Contract will be construed and governed by the provisions of applicable federal, state and local laws and regulations; and wherever any provision of the Contract or Contract documents shall conflict with any provision or requirement of federal, state or local law or regulation, then the provisions of law and regulation shall control. Where applicable to the Contract, the provisions of the General Laws are incorporated by reference into this Contract, including, but not limited to, the following:

General Laws Chapter 30B – Procurement of Goods and Services.

General Laws Chapter 30, Sec. 39, et seg: - Public Works Contracts.

General Laws Chapter 149, Section 44A, et seq: Public Buildings Contracts.

- 12.2 Wherever applicable law mandates the inclusion of any term and provision into a municipal contract, this Section shall be understood to import such term or provision into this Contract. To whatever extent any provision of this Contract shall be inconsistent with any law or regulation limiting the power or liability of cities and towns, such law or regulation shall control.
- 12.3 The Contractor shall comply with all Federal, State and local laws, rules, regulations, policies and orders applicable to the Work provided pursuant to this Contract, such provisions being incorporated herein by reference, and shall be responsible for obtaining all necessary licenses, permits, and approvals required for the supply of such Work.

The Contractor shall indemnify and hold the Town harmless for and against any and all fines, penalties or monetary liabilities incurred by the Town as a result of the failure of the Contractor to comply with the previous sentence. If any discrepancy or inconsistency is discovered in the Drawings, Specifications or Contract for this work in violation of any such law, by-law, regulation, order or decree, it shall forthwith report the same in writing to the Town. It shall, at all times, itself observe and comply with all such existing and future laws, by-laws, regulations, orders and decrees; and shall protect and indemnify the Town, and its duly appointed agents against any claim or liability arising from or based on any violation whether by him or its agents, employees or subcontractors of any such law, by-law, regulation or decree.

#### 13. Conflict of Interest:

Both the Town and the Contractor acknowledge the provisions of the State Conflict of Interest Law (General Laws Chapter 268A), and this Contract expressly prohibits any activity which shall constitute a violation of that law. The Contractor shall be deemed to have investigated the application of M.G.L. c. 268A to the performance of this Contract; and by executing the Contract documents the Contractor certifies to the Town that neither it nor its agents, employees, or subcontractors are thereby in violation of General Laws Chapter 268A.

#### 14. Certification of Tax Compliance

This Contract must include a certification of tax compliance by the Contractor, as required by General Laws Chapter 62C, Section 49A (Requirement of Tax Compliance by All Contractors Providing Goods, Services, or Real Estate Space to the Commonwealth or Subdivision).

#### 15. Non-Discrimination/Affirmative Action

The Contractor shall carry out the obligations of this Agreement in compliance with all requirements imposed by or pursuant to federal, State and local ordinances, statutes, rules and regulations and policies prohibiting discrimination in employment, including but not limited to, Title VII of the Civil Rights Act of 1964; the Age Discrimination in Employment Act of 1967; Section 504 of the Rehabilitation Act of 1973 and Mass. G. L. c. 151B, and any other executive orders, rules, regulations, requirements and policies relating thereto enacted by the Commonwealth of Massachusetts and the Town as they may be amended from time to time. Contractor shall not discriminate against any qualified employee or applicant for employment because of race, color, national origin, ancestry, ace, sex, religion, physical or mental handicap or sexual orientation.

The following provisions will not apply if the contract price is less than \$10,000.00 or where the Contractor employs fewer than six (6) persons. [The Town may, on a case by case basis, determine that the following provisions apply to contracts for less than \$10,000.00 or where the Contractor employs less than six (6) employees.]

- 15.1 As used in this section "affirmative action" means positive steps to ensure all qualified persons equal employment opportunity without regard to race, color, religion, sex or national origin at all stages of the employment process: recruitment, section, placement, promotion, training, layoff and termination. It may include, but is not limited to, the following:
  - (a) Inclusion in all solicitation and advertisements for employees of a statement that the Contractor is an "Equal Opportunity Employer";
  - (b) Placement of solicitations and advertisements for employees in media that reaches minority groups;
  - (c) Notification in writing of all recruitment sources that the Contractor solicits the referral of applicants without regard to race, color, religion, sex or national origin;
  - (d) Direct solicitation of the support of responsible and appropriate community, state and federal agencies to assist recruitment efforts;

- (e)Participation in, or establishment of, apprenticeship or training programs where outside programs are inadequate or unavailable to minority groups;
- (f) Modification of collective bargaining agreements to eliminate restrictive barriers established by dual lines of seniority, dual rates of pay or dual lines of promotion or progression which are based on race, color, religion, sex or national origin; and
- (g) Review selection, placement, promotion, training, layoff and termination procedures and requirements to ensure that they do not intentionally or unintentionally discriminate against qualified persons because of race, color, religion, sex or national origin.
- 15.2 The Contractor shall include in all compliance and progress reports submitted to the town a report which shall include: (a) A certificate stating that he or she is currently in compliance with the provisions of G.L. c. 152B and setting forth the Affirmative Action he or she is currently undertaking and will undertake during the contract period to provide equal employment opportunity for all qualified persons without regard to race, color, religion, sex or national origin; and (b) A statement in wiring supporting information signed by an authorized officer or agent on behalf of any labor union or other agency which refers workers or provides or supervises apprenticeship or other training programs which the Contractor deals, to the effect that the union or other agency's practices and policies do not discriminate on the basis of race, color, religion, sex or national origin; provided, in the event that the union or other agency shall refuse to execute such a statement, the Contractor need only so certify in writing.
- 15.3 A copy of any such report as described above, shall be filed in the office of the Town Clerk and shall upon said filing become a public record.
- 15.4 The Contractor will take Affirmative Action to ensure that employees are solicited and employed, and that employees are treated during employment, without regard to race, color, religion, sex or national origin.
- 15.5 The Contractor will in all solicitation or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.
- 15.6 In determining whether steps taken by the Contractor constitute Affirmative Action, the Town shall take into account the relevant characteristics of the Contractor including, but not limited to, the number of employees and the location of the principal and branch offices.

#### 16. Assignment:

The Contractor shall not assign, sublet or otherwise transfer this Agreement, in whole or in part, without the prior written consent of the Town, and shall not assign any of the moneys payable under this Contract, except by and with the written consent of the Town.

#### 17. Condition of Enforceability Against the Town:

This Contract is only binding upon, and enforceable against, the Town if: (1) the Contract is signed by the Board of Selectmen or its designee; and (2) endorsed with approval by the Town Accountant as to appropriation or availability of funds; and (3) endorsed with approval by the Town Counsel as to form.

#### 18. Corporate Contractor:

If the Contractor is a corporation, it shall endorse upon this Contract (or attach hereto) its Clerk's Certificate certifying the corporate capacity and authority of the party signing this Contract for the corporation. Such certificate shall be accompanied by a letter or other instrument stating that such authority continues in full force and effect as of the date the Contract is executed by the Contractor. This Contract shall not be enforceable against the Town of Egremont unless and until the Contractor complies with this section.

The Contractor, if a foreign corporation, shall file with the Commissioner of Corporations a Power of Attorney and duly authenticated copies of its Charter or Certificate of Incorporation; and said Contractor shall comply with all the laws of the Commonwealth.

#### 19. Contractor's Personnel:

The Contractor shall utilize only its employees and shall not utilize any third-party contractors without prior written approval of the Town.

#### 20. Liability of Public Officials:

To the full extent permitted by law, no official, employee, agent or representative of the Town of Egremont shall be individually or personally liable on any obligation of the Town under this Contract.

#### 21. Indemnification:

The Contractor shall indemnify, defend and save harmless the Town, the Town's officers, agents and employees, from and against any and all damages, liabilities, actions, suits, proceedings, claims, demands, losses, costs, expenses, recoveries and judgments of every nature and description (including attorneys' fees) that may arise in whole or in part out of or in connection with the work being performed or to be performed, or out of any act or omission by the Contractor, its employees, agents, subcontractors, material men, and anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by any party indemnified hereunder. The Contractor further agrees to reimburse the Town for damage to its property caused by the Contractor, its employees, agents, subcontractors or material men, and anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, including damages caused by his, its or their use of faulty, defective, or unsuitable material or equipment, unless the damage is caused by the Town's gross negligence or willful misconduct.

21.1 The Contractor further agrees to indemnify and hold harmless the Town, including the agents, employees and representatives of either, from and against all

claims, damages, losses and expenses, including attorney's fees, arising out of or resulting from the performance of the work, provided that any such claim, damage, loss or expense (a) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom and (b) is caused in whole or in part by any negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

- 21.2 The Contractor shall be responsible for all damage or injury to property of any character during the prosecution of the work resulting from any act, omission, neglect, or misconduct in the manner or method of executing the work or due to the non-execution of the work or at any time due to defective work or materials.
- 21.3 In any and all claims against the town or any of their agents or employees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this paragraph shall not be limited in anyway by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workmen's Compensation Acts, disability benefit acts or other employee benefit acts.
- 21.4 The Contractor hereby assumes the entire responsibility and liability for any and all injury to or death of any or all persons, including the Contractor's employees, and for any and all damage to property caused by, resulting from or arising in whole or in part out of any act, omission, or neglect on the part of the Contractor or of any Subcontractor or of anyone directly or indirectly employed by any of them, or of anyone for whose acts any of them may be liable in connection with operations under the Contract.

The foregoing provisions shall not be deemed to be released, waived, limit or modified in any respect by reason of any surety or insurance provided by the Contractor under the Contract.

#### 22. Insurance

#### 22.1 Workers Compensation Insurance:

The Contractor shall provide Workers Compensation Insurance in the amount of \$500,00.00/\$500,000.00/\$500,000.00 to all employees of the Contractor who are subject to the provisions of Chapter 152 of the General Laws of Massachusetts.

Failure to provide and continue in force such insurance during the period of this Contract shall be deemed a material breach of this Contract, shall operate as an immediate termination thereof, and Contractor shall indemnify the Town for all losses, claims, and actions resulting from the failure to provide the insurance required by this Article.

The Contractor shall furnish to the Town a certificate evidencing such insurance prior to the execution of this Contract before the same shall be binding on the parties thereto, except if specifically waived by the Town.

#### 22.2 Professional Liability Insurance

Liability of \$1 million per claim and \$3 million aggregate.

Failure to provide and continue in force such insurance during the period of this Contract shall be deemed a material breach of this Contract, shall operate as an immediate termination thereof, and Contractor shall indemnify the Town for all losses, claims, and actions resulting from the failure to provide the insurance required by this Article.

#### 22.3 Other Insurance Requirements

- a. Comprehensive commercial general liability insurance with limits of at least \$1 Million per occurrence and \$3 Million annual aggregate for property damage and \$1 Million per person and \$3 Million per occurrence for bodily injury, which shall include the Town of Egremont as an additional insured, and which shall cover bodily injury, sickness or disease, or death of any person including employees and those persons other than the Contractor's employees, and claims insured by usual personal liability coverage, death, or property damage arising out of the Work including injury or destruction of tangible property, including loss of use resulting therefrom.
- b. Motor vehicle insurance for any motor vehicles used in performing the Work, with limits of at least \$500,000 per person, and \$1 Million per accident.
- c. The intent of the Specifications regarding insurance is to specify minimum coverage and minimum limits of liability acceptable under the Contract. However, it shall be the Contractor's responsibility to purchase and maintain insurance of such character and in such amounts as will adequately protect it and the Town from and against all claims, damages, losses and expenses resulting from exposure to any casualty liability in the performance of the work, including and not limited to Professional liability insurance where applicable.
- d. All policies shall identify the Town as an additional insured (except Workers' Compensation). The Contractor shall notify the Town immediately upon the cancellation or amendment to any policy. Renewal Certificates shall be filed with the Town at least ten (10) days prior to the expiration of the required policies. Certificates evidencing all such coverage shall be provided to the Town upon the execution of this Agreement, and upon the renewal of any such coverage. Each such certificate shall specifically refer to this Contract and shall state that such

insurance is as required by this Contract. Failure to provide the notices required in this Section or to continue in force such insurance shall be deemed a material breach of this Contract and shall be grounds for immediate termination. Said insurance shall include: Workers Compensation/Employers' Liability Insurance, Business Automobile Liability Insurance, and Commercial General Liability Insurance (CGL). The CGL policy shall include coverage for liability arising from premises, operations, independent Contractors, personal injury, contractual liability. All Certificates of Insurance shall be on the "MIIA" or "ACORD" Certificate of Insurance form, shall contain true transcripts from the policies, authenticated by the proper officer of the Insurer, evidencing in particular those insured, the extent of coverage, the location and operations to which the insurance applies, the expiration date and the above-mentioned notice clauses. All insurance shall be written on an occurrence basis. Coverage's shall be maintained without interruption from date of the Contract until date of final payment and termination of any coverage required to be maintained after payment.

e. The Contractor shall obtain and maintain during the term of this Contract the insurance coverage in companies licensed to do business in the Commonwealth of Massachusetts and acceptable to the Town.

#### 23. Documents, Materials, Etc.

Any materials, reports, information, data, etc. given to or prepared or assembled by the Contractor under this Contract are to be kept confidential and shall not be made available to any individual or organization by the Contractor (except agents, servants, or employees of the Contractor) without the prior written approval of the Town, except as otherwise required by law. The Contractor shall comply with the provisions Chapter 66A of the General Laws of Massachusetts as it relates to public documents, and all other state and federal laws and regulations relating to confidentiality, security, privacy and use of confidential data.

Any materials produced in whole or in part under this Contract shall not be subject to copyright, except by the Town, in the United States or any other country. The Town shall have unrestricted authority to, without payment of any royalty, commission, or additional fee of any type or nature, publicly disclose, reproduce, distribute and otherwise use, and authorize others to use, in whole or in part, any reports, data or other materials prepared under this Contract.

All data, reports, programs, software, equipment, furnishings, and any other documentation or product paid for by the Town shall vest in the Town at the termination of this Contract. The Contractor shall at all times, during or after termination of this Contract, obtain the prior written approval of the Town before making any statement bearing on the work performed or data collected under this Contract to the press or issues any material for publication through any medium.

#### 24. No Employment

The Contractor acknowledges and agrees that it is acting as an independent Contractor for all

services rendered pursuant to this Contract, and neither the Contractor, nor its employees, agents, servants nor any person for whose conduct the Contractor is responsible shall be considered an employee or agent of the Town for any purpose and shall not file any claim or bring any action for any worker's compensation unemployment benefits and compensation for which they may otherwise be eligible as a Town employee as a result of work performed pursuant to the terms of this Contract.

#### 25. Audit, Inspection and Recordkeeping

At any time during normal business hours, and as often as the Town may deem it reasonably necessary, there shall be available in the office of the Contractor for the purpose of audit, examination, and/or to make excerpts or transcript all records, contracts, invoices, materials, payrolls, records of personnel, conditions of employment and other data relating to all matters covered by this Agreement.

#### 26. Payment

The Town agrees to make all reasonable efforts to pay to the Contractor the sum set forth in the Contractor's bid or proposal within thirty (30) days of receipt of an invoice detailing the work completed and acceptance from the Town of the work completed.

#### 27. Waiver and Amendment

Amendments, or waivers of any additional term, condition, covenant, duty or obligation contained in this Contract may be made only by written amendment executed by all signatories to the original Agreement, prior to the effective date of the amendment.

To the extent allowed by law, any conditions, duties, and obligations contained in this Contract may be waived only by written Agreement by both parties.

Forbearance or indulgence in any form or manner by a party shall not be construed as a waiver, nor in any manner limit the legal or equitable remedies available to that party. No waiver by either party of any default or breach shall constitute a waiver of any subsequent default or breach of a similar or different matter.

#### 28. Severability

If any term or condition of this Contract or any application thereof shall to any extent be held invalid, illegal or unenforceable by the court of competent jurisdiction, the validity, legality, and enforceability of the remaining terms and conditions of this Contract shall not be deemed affected thereby unless one or both parties would be substantially or materially prejudiced.

#### 29. Forum and Choice of Law

This Contract and any performance herein shall be governed by and be construed in accordance with the laws of the Commonwealth. Any and all proceedings or actions relating to subject matter herein shall be brought and maintained in the courts of the Commonwealth or the federal

district court sitting in the Commonwealth, which shall have exclusive jurisdiction thereof. This paragraph shall not be construed to limit any other legal rights of the parties.

#### 30. Notices

Any notice permitted or required under the provisions of this Contract to be given or served by either of the parties hereto upon the other party hereto shall be in writing and signed in the name or on the behalf of the party giving or serving the same. Notice shall be deemed to have been received at the time of actual service or three (3) business days after the date of a certified or registered mailing properly addressed. Notice to the Contractor shall be deemed sufficient if sent to the address set forth on page 1 or furnished from time to time in writing hereafter.

#### 31. Binding on Successors:

This Contract is binding upon the parties hereto, their successors, assigns and legal representatives (and where not corporate, the heirs and estate of the Contractor). Neither the Town nor the Contractor shall assign or transfer any interest in the Contract without the written consent of the other.

#### 32. Entire Agreement:

This Contract, including all documents incorporated herein by reference, constitutes the entire integrated agreement between the parties with respect to the matters described. This Contract supersedes all prior agreements, negotiations and representations, either written or oral, and it shall not be modified or amended except by a written document executed by the parties hereto.

IN WITNESS WHEREOF the parties have hereto and to two other identical instruments set forth their hands and executed this as an instrument under seal this the day and year first above written.

The Town of Egremont By the Board of Selectmen		The Contractor by:	
Signature	Date	Signature	Date
Signature	Date	Print Name & Title	
Signature	Date		
Certified as to Form:			
Town Counsel	Date		
Certified as to Appropriation/Availability of Funds:			
Town Accountant	Date		

## **CERTIFICATION OF GOOD FAITH**

The undersigned certifies under pains and penalties of perjury that this contract has been obtained in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

The Contractor by:		
J	Print Name	
	T://1 /A //1 :/	
	Title/Authority	
CERTIFICA	TE OF STATE TAX COMPLIANCE	2
Pursuant to Massachusetts C	General Laws, Chapter 62C, Section 49A	<b>\</b>
	, authorized signatory for	
name of signatory		
	, whose	
name of contracto	or	
principal place of business is at		
	does hereby certify under the pains and	d penalties of perjury
that	_ , , , ,	has paid all
	f contractor	<b>r</b>
	ied with all laws of the Commonwealth	of Massachusetts
	oyees and contractors, and withholding a	
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support.		
	Signature	Date

#### ATTACHMENT C GENERAL TERMS AND CONDITIONS

# TOWN OF EGREMONT STANDARD CONSTRUCTION CONTRACT

#### GENERAL CONDITIONS OF THE CONTRACT

#### **INDEX**

- 1. General Provisions, p. 2
- 2. Materials and Equipment Warranty, p. 6
- 3. Prosecution of the Work -- Liquidated Damages, p. 7
- 4. Changes in the Work, p. 9
- 5. Payment Provisions, p. 10
- 6. Warranties and Guarantee, p. 11
- 7. Insurance Requirements, p. 12
- 8. Indemnification, p. 16
- 9. Bonds, p. 17
- 10. Termination, p. 17
- 11. Non-Appropriation, p. 18
- 12. Records and Laws, p. 18
- 13. Choice of Law, p. 18
- 14. Statutory Provisions Incorporated by Reference, p.19

**Appendix A -- Statutory Provisions Incorporated by reference** 

**Appendix B -- Commonly-Used Forms** 

#### 1.0 GENERAL PROVISIONS

- **1.1** Scope of the Work. The Work comprises the completed project described in the Contract Documents and includes all labor, professional services, transportation, tools, materials, supplies, equipment, permits, approvals, documents, calculations, submittals, and certificates necessary to develop, perform, construct and complete the project in accordance with all applicable laws, ordinances, and regulations, and in accordance with the Contract Documents.
- **1.2** <u>Interpretation.</u> The Plans and Specifications and other Contract Documents are to be considered together and are intended to be mutually complementary, so that any work shown on the Plans though not specified in the Specifications, and any work specified in the Specifications though not shown on the Plans, is part of the Work to be performed by the Contractor. Capitalized terms not otherwise defined herein shall have the meanings assigned to them in the Owner-Contractor Agreement.
- **1.3** <u>Administrator</u>. The term "Administrator" means the person appointed by the Awarding Authority to administer this Contract. The Contractor shall address mail to the Administrator c/o the Awarding Authority.
- 1.4 Written Authorization. Actions taken, and approvals and decisions made by the Awarding Authority under this Contract require the prior approval and signature of the Administrator. These include, but are not limited to, the following: changes in the Contract Price, time for completion, or any other provision of this Contract; written orders, notices, and approvals given by the Awarding Authority pursuant to the Contract Documents or pursuant to any laws applicable to this Contract, including approval of "or equal" submissions; issuance of stop work orders; approval of Contractor's applications for payment; and termination of the Contract. Work undertaken by the Contractor not authorized by the Administrator's signature prior to the start of such work shall be considered unauthorized work and shall not entitle the Contractor to any extra payment. The Contractor shall perform, at its own expense, corrective measures required by the Awarding Authority due to any failure to obtain the prior approval of the Administrator for any item of work.
- 1.3 Contractor's General Duties. The Contractor shall perform the Work in a competent manner in accordance with the Contract Documents and all applicable laws. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences and procedures, and coordination of all portions of the Work under this Contract. The Contractor shall provide and perform for the Contract Price all of the duties and obligations set forth in the Contract Documents. Except as otherwise specified in this Contract, it is not the Contractor's responsibility to ascertain that the Contract Documents are in accordance with applicable Laws. However, if the Contractor observes that portions of the Contract Documents are at variance with legal requirements, the Contractor shall promptly notify the Awarding Authority of that fact in writing. If the Contractor performs Work knowing it to be contrary to legal requirements, the Contractor shall be liable for all damages caused thereby, including the cost of correcting the Work.
- **1.4** Sales Tax Exemption and Other Taxes. To the extent that materials and supplies are used or incorporated in the performance of this Contract, the Contractor

- is considered an exempt purchaser under the Massachusetts Sales Act, Chapter 14 of the Acts of 1966. The Contractor shall pay all taxes and tariffs of any sort related to the Work, subject to the applicable exemptions.
- **1.5** Permits, Fees and Notices. The Contractor shall secure and pay for all permits and governmental fees, licenses, and inspections necessary for proper execution and completion of the Work. The Contractor shall coordinate all efforts required to obtain these permits unless otherwise directed in writing by the Awarding Authority. The Contractor shall comply with and give notices required by laws, ordinances, rules, regulations, codes, and lawful orders of public authorities bearing on the performance of the Work.
- **1.6** <u>Safety Requirements.</u> The Contractor shall comply with all Federal, State, and local safety laws and regulations applicable to the Work.
- 1.7 Minimum Wage Rates. The Contractor shall comply with M.G.L. c. 149, §§26-27H. The wage schedule found in Exhibit A to the Instructions to Bidders lists the minimum wage rates that must be paid to all workers employed in the Work throughout the term of this Contract, subject to the exceptions provided in M.G.L c.149, §§ 26-27H.. The Awarding Authority is not responsible for any errors, omissions, or misprints in the said schedule. The Contractor shall not have any claim for extra compensation from the Awarding Authority arising from the fact that the actual wages paid to workers employed in the Work exceed the rates listed on the schedule or as otherwise provided by law. The Contractor shall cause a copy of the schedule to be posted in a conspicuous place at the Site during the term of the Contract. If reserve police officers are employed by the Contractor, they shall be paid the prevailing wage of regular police officers. (See M.G.L c.149, §34B).
- **1.8** Corporate Disclosures. The Contractor, if a foreign corporation, shall comply with M.G.L. c. 181, s.3 and s. 5, and M.G.L. c. 30, s.39L.
- 1.9 Safety Requirements; OSHA Training[M.G.L. c. 30, s. 39S]. The Contractor shall comply and shall cause all subcontractors and persons employed on the Work to comply with all applicable safety requirements. By executing this contract the Contractor hereby certifies that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and that all employees to be employed in the work subject to this bid have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration. Any employee found on a worksite subject to this section without documentation of successful completion of a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration shall be subject to immediate removal.
- **1.10 Payroll Records and Statement of Compliance.** The Contractor shall comply and shall cause its subcontractors to comply with Massachusetts General Law c. 149, s. 27B, which requires that a true and accurate record be kept of all

persons employed on the a project for which the prevailing wage rates have been provided. The Contractor and all Subcontractors shall keep these records and preserve them for a period of six years from the date of completion of the Contract. Such records shall be open to inspection by any authorized representative of the Awarding Authority or the Owner at any reasonable time, and as often as may be necessary. The Contractor shall, and shall cause its subcontractors to, submit weekly copies of their weekly payroll records to the Awarding Authority. In addition, the Contractor and each Subcontractor shall furnish to the Executive Department of Labor within fifteen days after completion of its portion of the Work a signed statement in the form required by the Awarding Authority.

1.11 Workforce Qualifications. The Contractor shall: (i) employ competent workers; (ii) enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work; (iii)not permit employment of unfit persons or persons not skilled in tasks assigned to them. Whenever the Administrator shall notify the Contractor in writing that any worker is, in the Administrator's opinion, incompetent, unfaithful, disorderly, or otherwise unsatisfactory, such employee shall be discharged from the Work and shall not again be employed on the Work except with the consent of the Administrator.

1.12 Affirmative Action, Non-Discrimination in Hiring and Employment.

Pursuant to Executive Order #478, by signing this Contract the Contractor hereby certifies under the pains and penalties of perjury that the Contractor currently complies with and will continue to comply with all federal and state laws, rules and regulations promoting fair employment practices or prohibiting employment discrimination and unfair labor practices and shall not discriminate in the hiring of any applicant for employment nor shall any qualified employee be demoted, discharged or otherwise subject to discrimination in the tenure, position, promotional opportunities, wages, benefits or terms and conditions of their employment because of race, color, national origin, ancestry, age, sex, religion, disability, handicap, sexual orientation or for exercising any rights afforded by law. Pursuant to Executive Order #390, the Contractor commits to purchasing supplies and services from certified minority or women-owned businesses, small businesses or businesses owned by socially or economically disadvantaged persons or persons with disabilities.

**1.13 Veterans Preference.** In the employment of mechanics and apprentices, teamsters, chauffeurs, and laborers in the performance of Work in the Commonwealth, preference shall first be given to citizens of the Commonwealth who have been residents of the Commonwealth for at least six months at the commencement of their employment and who are veterans as defined M.G.L. c.4, s.7 (34), and who are qualified to perform the work to which the employment relates and, within such preference, preference shall be given to service-disabled veterans; and secondly, to citizens of the Commonwealth generally who have been residents of the Commonwealth for at least six months at the commencement of their employment, and if they cannot be obtained in sufficient numbers, then to citizens of the United States.

1.14 Employment Eligibility Verification Requirements [8 U.S.C., ss. 1324a,1324b; M.G.L. c. 149, s. 19C; Executive Order No. 481]. The Contractor

hereby certifies under pains and penalties of perjury as a condition of receiving this Contract, that it shall not knowingly use undocumented workers in connection with the performance of the Work and that, pursuant to the requirements of federal law, the Contractor shall verify the immigration status of all workers employed in connection with the Work without engaging in unlawful discrimination, and that Contractor shall not knowingly or recklessly alter, falsify, or knowingly or recklessly accept altered or falsified documents of any worker. The Contractor shall cause all subcontractors to comply with this provision. The Contractor shall comply with Federal Department of Homeland Security Requirements in hiring any and all "employees" to be employed on the Work who are required to be listed in the certified payroll reports for the Work. Without limitation, such requirements shall include the good faith completion of the Federal Department of Homeland Security I-9 process by the Contractor for each of its employees. The Contractor shall execute a Certificate of Compliance with Employment Eligibility Verification Requirements (I-9 Certificate) simultaneously with the execution of this Contract. The contractor shall require each of its subcontractors and sub subcontractors to execute and provide to the Contractor an I-9 Certificate with the execution of each subcontract, and the Contractor shall immediately provide a copy to the Awarding Authority. The Contractor shall certify in each certified payroll report submitted to the Awarding Authority that the Form I-9 process was faithfully completed for all employees listed on the payroll report. Violation of this Section shall constitute a material breach of this Contract, subjecting the Contractor to sanctions including but not limited to monetary penalties, withholding of payments, contract suspension, or termination.

1.15 Weekly or Biweekly wage payments [M.G.L. c. 149, s. 148] The Contractor shall comply with, and shall cause its Subcontractors to comply with M.G.L. c. 149, s. 148 which requires the weekly or biweekly payment of employees within six days of the end of the pay period during which wages were earned if employed for five or six days of a calendar week, and within other periods of time under certain circumstances as set forth therein.

1.16 Anti-Boycott Covenant [Executive Order #130]. The Contractor warrants that during the time this Contract is in effect, neither it or any affiliated company, as hereafter defined, participates in or cooperates with an international boycott, as defined in Section 999(b) (3) and (4) of the Internal Revenue Code of 1954, as amended, or engages in conduct declared to be unlawful by M.G.L. c. 151E, s. 2. If there shall be a breach in the warranty, representation or agreement contained in this paragraph, then without limiting such other rights as it may have the Awarding Authority shall be entitled to rescind this contract. As used herein, an affiliated company shall be any business entity of which at least 51% of the ownership interests are directly or indirectly owned by the Contractor or by a person or persons or business entity or entities directly or indirectly owning at least 51% of the Ownership interests of the Contractor; or which directly or indirectly owns at least 51% of the Ownership interests of the Contractor.

**1.17 Labor Harmony [M.G.L. c. 30, s. 39S].** By executing this contract the Contractor hereby certifies that (1) that Contractor is able to furnish labor that can

work in harmony with all other elements of labor employed or to be employed in the work. The Contractor shall procure materials from such sources and shall manage its own forces and the forces of its Subcontractors and any subsubcontractors in such a manner as will result in harmonious labor relations on the site. The Contractor shall cause persons to be employed in the Work who will work in harmony with others so employed. Should the Work be stopped or materially delayed in the Awarding Authority's reasonable judgment due to a labor dispute, the Awarding Authority shall have the right to require the Contractor to employ substitutes acceptable to the Awarding Authority.

1.18 Risk of Loss. The Contractor shall bear the risk of loss with respect to any of its or its agents', employees' or subcontractors' vehicles, equipment or tools brought onto or left at the worksite and for any materials stored at the worksite.

1.19 Northern Ireland Certification [M.G.L. c. 7, s. 22C]. The Contractor certifies that it does not employ ten or more employees in an office or other facility in Northern Ireland and if the Contractor employs ten or more employees in an office or other facility located in Northern Ireland the Contractor certifies that it does not discriminate in employment, compensation, or the terms, conditions and privileges of employment on account of religious or political belief; and it promotes religious tolerance within the work place, and the eradication of any manifestations of religious and other illegal discrimination; and the Contractor is not engaged in the manufacture, distribution or sale of firearms, munitions, including rubber or plastic bullets, tear gas, armored vehicles or military aircraft for use or deployment in any activity in Northern Ireland.

**1.20 Energy Efficiency.** The Contractor commits to meet the minimum energy performance standards required pursuant to Executive Order # 484. If the Contract is for a project over 20,000 square feet, it must meet the Mass. LEED Plus building standard including: 1) certification by the U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) program; 2) energy performance 20% better than the Massachusetts Energy Code; 3) independent 3<sup>rd</sup> party commissioning; 4) reduction of outdoor water consumption by 50% and indoor water consumption by 20% relative to standard baseline projections; and 5) conformance with at least 1 of 4 identified smart growth criteria. If the Contract is for a project under 20,000 square feet, it must meet the minimum energy performance standards established by the Commonwealth of Massachusetts Sustainable Design Roundtable.

#### 2.0 MATERIALS AND EQUIPMENT WARRANTY

Materials and equipment to be installed as part of the Work (both or either of which are hereinafter referred to as "materials") shall be new, unused, of recent manufacture, assembled, and used in accordance with the best construction practices. The Contractor shall inform itself as to, and shall comply with, the provisions of M.G.L. c. 7, s. 23A, as amended, and shall abide by the same and all applicable rules, regulations and orders made thereunder in relation to the purchase of supplies and materials in the execution of the Work, including the provisions of M.G.L. c.7, s. 22, paragraph 17 which provides that there be "a preference in the purchase of

supplies and materials, other considerations being equal, in favor, first, of supplies and materials manufactured and sold within the Commonwealth, and, second, of supplies and materials manufactured and sold elsewhere within the United States."

#### 3.0 PROSECUTION OF THE WORK -- LIQUIDATED DAMAGES

- **3.1.** Beginning, Progress Schedule. The Contract time shall commence upon the date specified in the Notice to Proceed executed by the Administrator and delivered to the Contractor after the execution of this Contract. The Contractor shall begin Work at the Site within ten days of said date unless otherwise ordered in writing by the Awarding Authority. Prior to commencing the Work, the Contractor shall meet with representatives of the Awarding Authority to discuss the quality assurance program, safety program, labor provisions, progress schedule, schedule of values, and other Contract procedures. Upon Approval by the Administrator, the progress schedule shall constitute the progress schedule for the Work. Upon approval by the Administrator, the schedule of values shall be the basis for payment for the Work. The Contractor shall at the end of each month, or more often if required, furnish to the Awarding Authority a schedule meeting the requirements of the Specifications showing the actual progress of the parts of the Work in comparison with the approved progress schedule.
- **3.2** <u>Time for Completion of Work.</u> Time is of the essence of this Contract. The Work shall be completed within the time specified in Article 2 of the Owner Contractor Agreement subject only to extensions specifically permitted in accordance with the terms of this Contract.
- 3.3 <u>Definition of "Substantial Completion."</u> For the purposes of this Contract the term "Substantial Completion" shall occur when (1) the Contractor fully completes the Work or substantially completes the Work so that the value of the Work remaining to be done is, in the estimate of the Awarding Authority, less than one percent of the original Contract price, or (2) the Contractor substantially completes the work and the Awarding Authority takes possession for occupancy, whichever occurs first. For the purposes of the preceding sentences the term "substantially completes" means that the work required by the Contract has been completed except for minor incomplete or unsatisfactory work items that do not materially impair the usefulness of the Work.

#### 3. 4 Failure to Complete Work on Time - Liquidated Damages.

The Awarding Authority has determined that its damages as a result of Contractor's failure to complete the Work to Substantial Completion within the Contract time will be difficult or impracticable to ascertain. Accordingly, the Contractor shall pay to the Awarding Authority the sum designated as liquidated damages in the Contract for each and every calendar day that the Contractor is in default in completing the Work to Substantial Completion. Such moneys shall be paid as liquidated damages, and not as a penalty, to cover losses and expenses to the Awarding Authority resulting solely from the fact that the Work is not completed on time. Liquidated damages or a portion thereof may be waived by the Awarding Authority if the Contractor submits evidence satisfactory to the Awarding Authority that the delay was caused solely by conditions beyond the control of the Contractor

and that the Awarding Authority has not suffered any damages as a result of said delay.

- **3.5** <u>Collection of Liquidated Damages</u>. The Awarding Authority may recover liquidated damages by deducting the amount thereof from any moneys due or that might become due the Contractor, and if such moneys shall be insufficient to cover the liquidated damages, then the Contractor or the Surety shall pay to the Awarding Authority the amount due.
- **3.6** Awarding Authority's Approvals and Interpretations. Decisions by the Awarding Authority regarding interpretation of the specifications, approval of equipment, material or any other approval, or progress of the Work, shall be made promptly and, in any event, no later than thirty days after the Contractor's written submission for decision; but if such decision requires extended investigation and study, the Awarding Authority shall, within thirty days after the receipt of the submission, give the Contractor written notice of the reasons why the decision cannot be made within the thirty day period and the date by which the decision will be made.
- 3.7 Extension for Delays Caused by Awarding Authority. The only circumstances under which the Contract Price shall be increased due to delays caused by the Awarding Authority are those specified in M.G.L. c. 30, §390 appearing in Appendix A to these General Conditions of the Contract. In all other cases the Contractor shall be entitled neither to increase the Contract Price nor to receive damages on account of any hindrances or delays, avoidable or unavoidable, but if the delay is caused by the Awarding Authority, the Contractor shall be entitled to an extension of time to the extent provided in M.G.L. c. 30, §390. The Contractor must submit any claim under this paragraph to the Awarding Authority in writing as soon as practicable after the end of the Awarding Authority's suspension, delay, interruption or failure to act and, in any event, not later than the date of final payment under this Contract. Except for costs due to a suspension order, the Awarding Authority shall not approve any costs in the claim incurred more than 20 days before the Contractor notified the Awarding Authority in writing of the act or failure to act or the Awarding Authority that gave rise to the claim.
- 3.8 Awarding Authority's Right to Reject Defective Materials and Work.

  Except as otherwise provided herein, the Awarding Authority's inspection of the Work shall not relieve the Contractor of any of its responsibilities hereunder, and defective work shall be corrected. The Awarding Authority may reject unsuitable work, notwithstanding that such work and materials have been previously accepted for payment. If any part of the Work shall be found defective at any time before the final acceptance of the whole Work, the Contractor shall promptly correct such defect in a manner satisfactory to the Awarding Authority. If any material brought upon the site for use in the Work shall be rejected by the Awarding Authority as not in conformity with the Contract Documents, the Contractor shall promptly remove such materials from the site.
- **3.9** Substantial Completion of the Work; Final Completion; Awarding Authority's Remedies. When the Work has reached the point of Substantial Completion as shown on Approved payment request, the Contractor shall assist the

Awarding Authority in the development of a punch list identifying those items of unfinished or unacceptable Work that remain to be performed or corrected under the Contract. The Contractor shall complete the lunch list items to final completion within 30 days after the Awarding Authority's approval of the punch list. At any time after the value of the Work remaining to be done is, in the estimation of the Awarding Authority, less than 1 per cent of the adjusted Contract price, or the Awarding Authority has determined that the Contractor has substantially completed the work and the Awarding Authority has taken possession for occupancy, the Awarding Authority may send to the Contractor by certified mail, return receipt requested, a complete and final list of all incomplete and unsatisfactory work items, including, for each item on the list, a good faith estimate of the fair and reasonable cost of completing such item. The Contractor shall then complete all such work items within 30 days of receipt of such list or before the Contract completion date. whichever is later. If the Contractor fails to complete all incomplete and unsatisfactory work items within 45 days after receipt of such items furnished by the Awarding Authority or before the Contract completion date, whichever is later, subsequent to an additional 14 days' written notice to the Contractor by certified mail, return receipt requested, the Awarding Authority may terminate this Contract and complete the incomplete and unsatisfactory work items and charge the cost of same to the Contractor and such termination shall be without prejudice to any other rights or remedies the Awarding Authority may have under this Contract.

#### 4.0 CHANGES IN THE WORK

- **4.1** Changes within the Scope of the Work. A change order may be issued by the Awarding Authority for changes in the Work within the scope of the Contract, including but not limited to, changes in: (1) the Plans and Specifications; (2) the method or manner of performance of the Work; (3) the Awarding Authority-furnished facilities, equipment, materials, services, or Site; or (4) the schedule for performance of the Work. The Contractor shall immediately perform any change order work that is ordered in writing by the Awarding Authority.
- **4.2.** Request for Equitable Adjustment due to Change Order. Whenever a change order is issued by the Awarding Authority that will cause a change in the Contractor's cost or time for performance, the Contractor or the Awarding Authority may request an equitable adjustment in the Contract Price or the Contract time. A request for such an adjustment shall be in writing and shall be submitted by the party making such claim to the other party.
- **4.3.** <u>Latent Conditions.</u> If, during the progress of the Work, the Contractor or the Awarding Authority discovers that the actual subsurface or latent physical conditions encountered at the Site differ substantially or materially from those indicated in the Contract Documents, then either the Contractor or the Awarding Authority may request an equitable adjustment in the Contract Price in accordance with M.G.L. c.30, §39N appearing in Appendix A attached to these General Conditions of the Contract. Likewise if the latent or subsurface physical condition causes a change in the time for performing the Work, either the Contractor or the

Awarding Authority may request an equitable adjustment of the time for the performance of the Work.

- **4.4** Computation of Equitable Adjustments. Equitable adjustments in the Contract Price shall be determined according to one of the following methods, or a combination thereof, as determined by the Awarding Authority: (1) fixed price basis, provided that the fixed price shall be inclusive of items (a) through (e) below and shall be computed in accordance with those provisions; (2) estimated lump sum basis to be adjusted in accordance with Contract unit prices or other agreed upon unit prices provided that the unit prices shall be inclusive of all costs related to such equitable adjustment; (3) time and materials basis to be subsequently adjusted on the basis of actual costs (but subject to a predetermined "not to exceed limit") calculated as follows: (a) the direct cost (or credit) for labor at the minimum wage rates established for this Contract pursuant to M.G.L. c. 149, s 26-27H, and the direct cost for material and use of equipment;
- (b) plus (or minus) the cost of workmen's compensation insurance, liability Insurance, Federal Social Security and Massachusetts Unemployment Compensation, or as an alternative the Contractor may elect to use a flat 30% of the total labor rate computed in accordance with subparagraph (a) above;
- (c) plus an allowance equal to 20% of the amount of (a) above for overhead, superintendence and profit (said 20% allowance shall be paid to the Contractor and the Contractor and said subcontractors shall agree upon the distribution of this amount as a matter of contract between them)., (d) plus (or minus) the actual direct additional premium costs and expenses incurred as a result of collective bargaining agreements or other agreements between organized labor and employers, and plus (or minus) (e) the actual direct premium cost of payment and performance bonds required of Contractor and filed Subcontractors for this Contract. If the net change is an addition to the Contract Price, it shall include the Contractor's overhead, superintendence and profit. On any change that involves a net credit, no allowance for overhead, superintendence and profits shall be included. For any change that does not include labor performed or materials installed in the project, there will be no markup for the Contractor's overhead, superintendence, and profit, even though there may be a net increase in the Contract Price. Charges for small tools known as "tools of the trade" are not to be computed in the amount of any change in the Contract Price.
- **4.4** <u>Appeal Procedure</u>. If the Contractor disputes a change, an equitable adjustment, or a Contract interpretation by the Awarding Authority, the Contractor shall follow the procedures set forth in M.G.L. c. 30, §39Q appearing in Appendix A to these General Conditions of the Contract.

#### 5.0 PAYMENT PROVISIONS

**5.1** <u>Applications for Periodic Payments.</u> Once each month, on a date established at the beginning of the Work, the Contractor shall deliver to the Awarding Authority an itemized Application for Payment, supported by such data substantiating the Contractor's right to payment as the Awarding Authority may require. The application shall reflect a minimum of 5% retainage and shall be subject to, and

processed in accordance with, the provisions of M.G.L. c. 30, §39K appearing in Appendix A to these General Conditions. The Contractor may include in a periodic estimate the value of materials or equipment delivered at the Site (or at some location agreed to in writing) only upon delivery to the Awarding Authority of: (1) an acceptable transfer of title on the form provided by the Awarding Authority; (2) written certification by the Contractor (or applicable subcontractor) on the form provided by the Awarding Authority that the Contractor (or the Subcontractor which executed the transfer of title) is the lawful owner and that the materials or equipment are free from all encumbrances, accompanied by receipted invoices or other acceptable proof of prior payment for such materials; (3) a stored materials insurance binder that covers the materials for which payment is requested, that names the Owner as an insured party should the stored materials be subjected to any casualty, loss, or theft prior to their inclusion in the Work. The material(s) or equipment must, in the judgment of the Designer (1) meet the requirements of the Contract, including prior shop drawing, product data, and sample approval, (2) be ready for use, and (3) be properly stored by the Contractor and be adequately protected until incorporated into the Work. See also Article V.5.C of these General Conditions of the Contract concerning the cost of inspections.

- **5.2** <u>Deductions by the Awarding Authority</u>. The Awarding Authority may deduct from any application for a periodic payment submitted by the Contractor a retention based upon the value of its claims against the Contractor plus a retention of 5% of the approved amount of the Application for Payment and any other amounts authorized by M.G.L. c. 30, §39K.
- **5.3** <u>Final Payment</u>. Final Payment under this Contract shall be processed in accordance with the procedures set forth in M.G.L. c. 30, §39K. The acceptance by the Contractor of the last payment due under this Contract or the Contractor's execution of the Final Certificate of Completion, shall operate as a release to the Awarding Authority from all claims and liability related to this Contract.

#### 6.0 WARRANTIES AND GUARANTEE

- **6.1** Warranty. The Contractor warrants to the Awarding Authority that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform with the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective.
- **General Guaranty**. If at any time during the period of one (1) year from the date of the its substantial completion, as shown on an approved payment request, the Work or any part of the Work shall in the reasonable determination of the Awarding Authority require replacing or repairing due to the fact that it is broken, defective, or otherwise does not conform to the Contract Documents, the Awarding Authority will notify the Contractor to make the required repairs or replacement. If the Contractor shall neglect to commence such repairs or replacements to the satisfaction of the Awarding Authority within ten (10) days from the date of giving or mailing such

notice, then the Awarding Authority may employ other persons to make said repairs or replacements. The Contractor agrees, upon demand, to pay to the Awarding Authority all amounts which the Awarding Authority expends for such repairs or replacements. For items of work completed after substantial completion, the one-year guarantee shall commence at the time the Awarding Authority approves of the completion of such items. This one-year guarantee shall not limit any express guaranty or warranty required to be assigned to the Awarding Authority pursuant to the terms of the Plans and Specifications.

#### 7.0 INSURANCE REQUIREMENTS

#### 7.1 Insurance Generally.

**A.** The Contractor shall purchase and maintain insurance of the type and limits listed in this Article with respect to the operations as well as the completed operations of this Contract. This insurance shall be provided at the Contractor's expense and shall be in full force and effect for the full term of the Contract or for such longer period as this Article requires.

- **B.** All policies shall be written on an occurrence basis and be issued by companies lawfully authorized to write that type of insurance under the laws of the Commonwealth with a financial strength rating of "A-" or better as assigned by AM Best Company, or an equivalent rating assigned by a similar rating agency acceptable to the Awarding Authority, or otherwise acceptable to the Awarding Authority. **C.** Contractor shall submit three originals of each certificate of insurance, acceptable to the Awarding Authority, simultaneously with the execution of this Contract. Certificates shall show each type of insurance, insurance company, policy number, amount of insurance, deductibles and/or self-insured retentions, and policy effective and expiration dates. Certificates shall show the Awarding Authority and the Owner and anyone else the Awarding Authority requests as an additional insured as to all policies of liability insurance. Certificates shall specifically note the following:
- that the General Liability policy includes contractual liability
- that the General Liability policy includes the Owner and Awarding Authority as additional insureds for ongoing operations (CG 20 10) and for completed operations (CG 37 10) or equivalent endorsements.
- that the automobile liability, umbrella liability and pollution liability policies include the Owner and Awarding Authority as additional insureds
- that the General Liability policy includes endorsement CG 24 04 or equivalent, a Waiver of Subrogation in favor of the Owner and Awarding Authority
- that the Builders' Risk or Installation Floater is on an all risk basis including earthquake and flood, and includes the Owner and Awarding Authority, contractor, subcontractors and suppliers of any tier as named insureds or loss payees as their interests may appear.
- that none of the coverages shall be cancelled, terminated, or materially modified unless and until 30 days prior notice is given in writing to the Awarding Authority.

Contractor shall submit updated certificates prior to the expiration of any of the policies referenced in the certificates so that the Awarding Authority shall at all times possess certificates indicating current coverage.

- **D.** The Contractor shall file one certified complete copy of all policies and endorsements with the Awarding Authority within sixty days after Contract award. If the Awarding Authority or the Owner is damaged by the Contractor's failure to maintain such insurance and to comply with the terms of this Article, then the Contractor shall be responsible for all costs and damages to the Owner attributable thereto.
- **E.** Termination, cancellation, or material modification of any insurance required by this Contract, whether by the insurer or the insured, shall not be valid unless written notice thereof is given to the Awarding Authority at least thirty days prior to the effective date thereof, which shall be expressed in said notice.
- **F.** The Contractor is responsible for the payment of any and all deductibles under all of the insurance required below. Neither the Owner nor the Awarding Authority shall in any instance be responsible for the payment of deductibles, self-insured retentions, or any portion thereof.

#### 7.2 Contractor's Commercial General Liability.

**A.** The Contractor shall purchase and maintain general liability coverage on the ISO form CG 00 01 or equivalent, including products and completed operations, on an occurrence basis. The form must be amended to state that the aggregate limit applies on a per location/project basis. The policy shall provide the following minimum coverage to protect the Contractor from claims with respect to the operations performed by Contractor and any employee, subcontractor, or supplier, or by anyone for whose acts they may be liable unless a higher coverage is specified in Exhibit A to the Owner - Contractor Agreement, in which case the Contractor shall provide the additional coverage:

Bodily Injury & \$1,000,000 each occurrence

Property Damage \$2,000,000 general aggregate, per project

Products & Completed Operations\$1,000,000 annual aggregate Personal & Advertising Injury \$1,000,000 each occurrence

Medical Expenses \$10,000

- **B.** This policy shall include coverage relating to explosion, collapse, and underground property damage.
- C. This policy shall include contractual liability coverage.
- **D.** The completed operations coverage shall be maintained for a period of three (3) years after Substantial Completion and acceptance by the Awarding Authority. The Contractor shall provide renewal certificates of insurance to the Awarding Authority as evidence that this coverage is being maintained.
- **E.** If the Work includes work to be performed within 50 feet of a railroad, any exclusion for liability assumed under contract for work within 50 feet of a railroad shall be deleted.
- **F.** This policy shall include the Owner and Awarding Authority and anyone else requested by the Awarding Authority as additional insureds via endorsements CG 20

10 for ongoing operations and CG 20 37 for completed operations This policy shall be primary and non-contributory with respect to any other insurance available to additional insureds.

**G.** The policy shall include endorsement CG 24 04, a Waiver of Subrogation in favor of the Awarding Authority and Owner.

#### 7.3 Automobile Liability.

**A.** The Contractor shall purchase and maintain the following minimum coverage with respect to the operations of any owned, non-owned, and hired vehicles including trailers used in the performance of the work, unless a higher coverage is specified in Exhibit A to the Owner - Contractor Agreement, in which case the Contractor shall provide the additional coverage:

Bodily Injury & Property Damage \$1,000,000 combined single limit

- **B.** The policy shall include a CA 99 48 Broadened Pollution Endorsement. If specified in Exhibit A. to the Owner Contractor Agreement, the Contractor, if hauling contaminants and/or pollutants, must adhere to Sections 29 and 30 of the Motor Carrier Act of 1980, which shall include coverage Form MCS-90.
- **C.** The policy shall name the Owner and Awarding Authority as Additional Insureds.
- **D**. The policy shall contain a Waiver of Subrogation in favor of the Awarding Authority and Owner.

#### 7.4 Worker's Compensation.

**A.** The Contractor shall provide the following coverage in accordance with M.G.L. c.149 §34A and c.152 as amended, unless a higher coverage is specified in Exhibit A to the Owner - Contractor Agreement, in which case the Contractor shall provide the higher coverage:

Worker's Compensation Statutory limits

Employer's Liability \$ 500,000 each accident

\$ 500,000 disease per employee \$ 500,000 disease policy aggregate

- **B.** If specified in Exhibit A to the Owner Contractor Agreement the policy must be endorsed to cover United States Longshoremen & Harborworkers Act (USLHW), Maritime Liability for \$1,000,000/\$1,000,000, or Federal Employer's Liability Act liability.
- **C.** The policy shall contain a Waiver of Subrogation in favor of the Owner and the Awarding Authority.

#### 7.5 Contractor's Pollution Liability.

If required by Exhibit A to the Owner - Contractor Agreement, the Contractor shall purchase and maintain coverage for bodily injury and property damage resulting from liability arising out of pollution related exposures such as asbestos abatement, lead paint abatement, tank removal, removal of contaminated soil, etc. The insurance policy shall cover the liability of the Contractor during te process of removal, storage, transport and disposal of hazardous waste and contaminated soil and/or asbestos

abatement. The policy shall include coverage for on-Site and off-Site bodily injury and loss of, damage to, or loss of use of property, directly or indirectly arising out of the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gas, waste materials or other irritants, contaminants or pollutants into or upon the land, the atmosphere or any water course or body of water, whether it be gradual or sudden and accidental. The policy shall also include defense and clean-up costs. The Awarding Authority and the Owner shall be named as an additional insured and coverage must be on an occurrence basis. The amount of coverage shall be \$1,000,000 per occurrence and \$3,000,000 in the aggregate unless a higher amount is specified in Exhibit A to the Owner - Contractor Agreement, in which case the Contractor shall provide the additional coverage.

## **7.6** <u>Builder's Risk/ Installation Floater/Stored Materials (</u>If required by Exhibit A to the Owner – Contractor Agreement)

- **A.** The Contractor shall purchase and maintain coverage against loss or damage on all Work included in this Contract in an amount equal to the Contract Price. Such coverage shall be written on an all risks basis or equivalent form and shall include, without limitation, insurance against perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, terrorism ("certified" and "non-certified"), collapse, earthquake, flood (if the project is not in an "A" or a "V" flood Zone), windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's and Contractor's services and expenses required as a result of such insured loss. This policy and/or installation floater shall include transportation and Stored Materials coverage in an amount equal to the value of the stored materials as required in **C**. below.
- **B.** When Work will be completed on existing buildings owned by the Owner, the Contractor shall provide an installation floater, in the full amount of the Contract Price. Such coverage shall be written on an all risks basis or equivalent form and shall include, without limitation, insurance against perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood (if the project is not in an "A" or a "V" flood Zone), windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's and Contractor's services and expenses required as a result of such insured loss. This policy and/or installation floater shall include transportation and Stored Materials coverage in an amount equal to the value of the stored materials as required in **C**. below.
- **C.** The Contractor shall maintain insurance on delivered and/or stored material designated to be incorporated in the Work against fire, theft or other hazards. Any loss or damage of whatever nature to such material while stored at an off Site location shall be forthwith replaced by the Contractor at no expense to the Awarding Authority.

- **D.** The policy or policies shall specifically state that they are for the benefit of and payable to the Awarding Authority, Owner, the Contractor, and all persons furnishing labor or labor and materials for the Contract Work, as their interests may appear. The policy or policies shall list the Awarding Authority, Owner, the Contractor, and Subcontractors of any tier as named insureds.
- **E.** Coverage shall include any costs for work performed by the Designer or any consultant as the result of a loss experienced during the term of this Contract.
- **F.** Coverage shall include permission for temporary occupancy and a Waiver of Subrogation in favor of the Owner and Awarding Authority.
- **G.** Coverage shall be maintained until final acceptance by the Awarding Authority of the Contract and final payment has been made.
- **H.** A loss under the property insurance shall be adjusted by the Contractor as fiduciary and made payable to the Contractor as fiduciary for the insureds. The Contractor shall pay the subcontractors their just shares of insurance proceeds received by the Contractor and shall require subcontractors to make payments to their sub-subcontractors in similar manner.

#### 7.7 <u>Umbrella Coverage.</u>

The Contractor shall provide Umbrella Coverage in form at least as broad as primary coverages required by Sections 2, 3 and 5 of this Article in the following amount unless a higher amount is specified in Exhibit A to the Owner - Contractor Agreement, in which case the Contractor shall provide the higher amount:

Limit of liability: \$1,000,000 per occurrence

#### 7.8 Additional types of Insurance.

The Contractor shall provide such other types of insurance as may be required by Exhibit A to the Owner - Contractor Agreement.

#### 8.0 INDEMNIFICATION

The Contractor shall indemnify, defend (with counsel subject to the supervision of the Attorney General of the Commonwealth of Massachusetts as required by M.G.L. c. 12, §3) and hold harmless the Awarding Authority and the Commonwealth and their officers, agents, divisions, agencies, employees, representatives, successors and assigns from and against all claims, damages, losses and expenses, including but not limited to court costs and attorneys' fees, arising out of or resulting from the performance of the Work, including but not limited to those arising or resulting from: labor performed or furnished and/or materials used or employed in the performance of the Work; violations by Contractor, any Subcontractor, or by any person directly or indirectly employed or used by any of them in the performance of the Work or anyone for whose acts any of them may be liable (Contractor, subcontractor and all such persons herein collectively called "Contractor's Personnel") of any Laws; violations of any provision of this Contract by any of Contractor's Personnel; injuries to any persons or damage to any property in connection with the Work; any act, omission, or neglect of Contractor's Personnel. The Contractor shall be obligated as provided

above, regardless of whether or not such claims, damages, losses and/or expenses, are caused in whole or in part by the actions or inactions of a party indemnified hereunder. In any and all claims by Contractor's Personnel against parties indemnified hereunder, the Contractor's indemnification obligation set forth above shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this Article 8.

#### 9.0 BONDS

The Contractor shall provide the Awarding Authority with a Performance Bond and a Payment or Labor and Materials Bond in the form provided by the Awarding Authority, executed by a surety company licensed by the Commonwealth of Massachusetts' Division of Insurance and whose name appears on United States Treasury Department Circular 570. Both the Performance Bond and the Payment Bonds shall be in an amount equal to the Contract Sum unless, with respect to the Payment Bond or Labor and Materials Bond a lesser amount of no less than one half the contract price is expressly specified in the Advertisement or Instructions to Bidders, or with respect to the Performance Bond no such bond is required as expressly set forth in the Advertisement or Instructions to Bidders.

#### 10.0 TERMINATION

#### 10.1 Termination for Cause.

The Awarding Authority may terminate this Contract for cause if it determines that any of the following circumstances have occurred:

- -- the Contractor is adjudged bankrupt or has made a general assignment for the benefit of its creditors;
- -- a receiver has been appointed of the Contractor's property;
- -- all or a part of the Work has been abandoned;
- -- the Contractor has sublet or assigned all or any portion of the Work, the Contract, or claims thereunder, without the prior written consent of the Awarding Authority, except as provided in the Contract Documents;
- -- the Awarding Authority has determined that the rate of progress required on the project is not being met;
- -- the Contractor has substantially violated any provisions of this Contract. The Awarding Authority may complete the Work or any part thereof, and charge its expense of so completing the work or part thereof, to the Contractor. The Awarding Authority may take possession of and use any materials, machinery, implements and tools found upon the site of said Work. The Awarding Authority shall not be liable for any depreciation, loss or damage to said materials, machinery, implements or tools during said use and the Contractor shall be solely responsible for their removal from the Project site after the Awarding Authority has no further use for them.

#### 10.2 Termination for Convenience.

- (a) In the event that this Contract is terminated by the Awarding Authority prior to the completion of construction and termination is not based on a reason listed in Paragraph 10.1, the Contractor shall be compensated for its costs incurred, including reasonable costs of de-mobilization, calculated on a percent completion basis covering the period of time between the last Approved application for payment and the date of termination.
- (b) Payment by the Awarding Authority pursuant to Subparagraph 10.2(a) shall be deemed to fully compensate the Contractor for all claims and expenses directly or indirectly attributable to the termination, including any claims for lost profits.

#### 11. NON-APPROPRIATION

The Commonwealth certifies that at the time of the execution of this Contract, sufficient appropriations exist and shall be encumbered to fund the Contract Price. Payments are subject to appropriation and shall be made only for work performed in accordance with the terms of this Contract. The Contractor shall not be obligated to perform, and may not perform, work outside the duration and scope of this Contract without an appropriate amendment to this Contract, and a sufficient appropriation(s) to support such additional work. The Commonwealth may immediately terminate or suspend this Contract in the event that the appropriation(s) funding this Contract is eliminated or reduced to an amount which will be insufficient to support anticipated future obligations under this Contract.

#### 12. RECORDS AND LAWS

The Contractor shall make, and keep for at least six years after final payment, books, records, and accounts, which in reasonable detail accurately and fairly reflect the transactions and dispositions of the Contractor. [M.G.L. c. 30, §39R(b)(1)-(2)].

Until the expiration of six years after final payment, the Office of the Inspector General, and the Commissioner of DCAM shall have the right to examine any books, documents, papers or records of the Contractor or of its subcontractors that directly pertain to, and involve transactions relating to, the Contractor or its subcontractors. [M.G.L. c. 30, §39R(b)(1)-(2)]. If this is a materials contract with a contract price of over \$100,000 the contractor shall also comply with M.G.L. c. 30, §39R(c). Furthermore, pursuant to Executive Order #195, the Governor or his designee, the secretary of administration and finance, and the state auditor or his designee shall have the right at reasonable times and upon reasonable notice to examine the books, records and other compilations of data or the Contractor which pertain to the performance and requirements of this Contract.

#### 13. CHOICE OF LAW

This Contract shall be construed under and governed by the laws of the Commonwealth of Massachusetts. The Contractor, and the agents thereof, agree to bring any federal or state legal proceedings arising under this Contract, in which either the Commonwealth or the Awarding Authority is a party, in a court of competent jurisdiction within the Commonwealth of Massachusetts. This section

shall not be construed to limit any rights a party may have to intervene in any action, in any court or wherever, pending, in which the other is a party.

#### 14. STATUTORY PROVISIONS INCORPORATED BY REFERENCE

The statutory provisions appearing in Appendix A attached hereto are incorporated into this Contract by reference.

#### APPENDIX A

#### **Statutory Provisions Incorporated by Reference**

Chapter 30: Section 39N. Construction contracts; equitable adjustment in contract price for differing subsurface or latent physical conditions.

Section 39N. Every contract subject to section forty-four A of chapter one hundred and forty-nine or subject to section thirty-nine M of chapter thirty shall contain the following paragraph in its entirety and an awarding authority may adopt reasonable rules or regulations in conformity with that paragraph concerning the filing, investigation and settlement of such claims: If, during the progress of the work, the contractor or the awarding authority discovers that the actual subsurface or latent physical conditions encountered at the site differ substantially or materially from those shown on the plans or indicated in the contract documents either the contractor or the contracting authority may request an equitable adjustment in the contract price of the contract applying to work affected by the differing site conditions. A request for such an adjustment shall be in writing and shall be delivered by the party making such claim to the other party as soon as possible after such conditions are discovered. Upon receipt of such a claim from a contractor, or upon its own initiative, the contracting authority shall make an investigation of such physical conditions, and, if they differ substantially or materially from those shown on the plans or indicated in the contract documents or from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the plans and contract documents and are of such a nature as to cause an increase or decrease in the cost of performance of the work or a change in the construction methods required for the performance of the work which results in an increase or decrease in the cost of the work, the contracting authority shall make an equitable adjustment in the contract price and the contract shall be modified in writing accordingly.

# Chapter 30: Section 39O. Contracts for construction and materials; suspension, delay or interruption due to order of awarding authority; adjustment in contract price; required provisions.

Section 390. Every contract subject to the provisions of section thirty-nine M of this chapter or subject to section forty-four A of chapter one hundred forty-nine shall contain the following provisions (a) and (b) in their entirety and, in the event a suspension, delay, interruption or failure to act of the awarding authority increases the cost of performance to any subcontractor, that subcontractor shall have the same rights against the general contractor for payment for an increase in the cost of his performance as provisions (a) and (b) give the general contractor against the awarding authority, but nothing in provisions (a) and (b) shall in any way change, modify or alter any other rights which the general contractor or the subcontractor may have against each other. (a) The awarding authority may order the general contractor in writing to suspend, delay, or interrupt all or any part of the work for such period of time as it may determine to be appropriate for the convenience of the awarding authority; provided however, that if there is a suspension, delay or interruption for fifteen days or more or due to a failure of the awarding authority to act within the time specified in this contract, the awarding authority shall make an adjustment in the contract price for any increase in the cost of performance of this contract but shall not include any profit to the general contractor on such increase; and provided further, that the awarding authority shall not make any adjustment in the contract price under this provision for any suspension, delay, interruption or failure to act to the extent that such is due to any cause for which this contract provides for an equitable adjustment of the contract price under any other contract provisions. (b) The general contractor must submit the amount of a claim under provision (a) to the awarding authority in writing as soon as practicable after the end of the suspension, delay, interruption or

failure to act and, in any event, not later than the date of final payment under this contract and, except for costs due to a suspension order, the awarding authority shall not approve any costs in the claim incurred more than twenty days before the general contractor notified the awarding authority in writing of the act or failure to act involved in the claim.

# Chapter 30: Section 39P. Contracts for construction and materials; decisions of awarding authority on interpretation of specifications, etc. required promptly upon submission; time limit; notice.

Section 39P. Every contract subject to section thirty-nine M of this chapter or section forty-four A of chapter one hundred forty-nine which requires the awarding authority, any official, its architect or engineer to make a decision on interpretation of the specifications, approval of equipment, material or any other approval, or progress of the work, shall require that the decision be made promptly and, in any event, no later than thirty days after the written submission for decision; but if such decision requires extended investigation and study, the awarding authority, the official, architect or engineer shall, within thirty days after the receipt of the submission, give the party making the submission written notice of the reasons why the decision cannot be made within the thirty day period and the date by which the decision will be made.

## Chapter 30: Section 39Q. Contracts for capital facility construction, etc.; contents; annual claims report.

Section 39Q. (1) Every contract awarded by any state agency as defined by section thirty-nine A of chapter seven for the construction, reconstruction, alteration, remodeling, repair or demolition of any capital facility as defined by the aforesaid section thirty-nine A shall contain the following subparagraphs (a) through (d) in their entirety:

- (a) Disputes regarding changes in and interpretations of the terms or scope of the contract and denials of or failures to act upon claims for payment for extra work or materials shall be resolved according to the following procedures, which shall constitute the exclusive method for resolving such disputes. Written notice of the matter in dispute shall be submitted promptly by the claimant to the chief executive official of the state agency which awarded the contract or his designee. No person or business entity having a contract with a state agency shall delay, suspend, or curtail performance under that contract as a result of any dispute subject to this section. Any disputed order, decision or action by the agency or its authorized representative shall be fully performed or complied with pending resolution of the dispute.
- (b) Within thirty days of submission of the dispute to the chief executive official of the state agency or his designee, he shall issue a written decision stating the reasons therefor, and shall notify the parties of their right of appeal under this section. If the official or his designee is unable to issue a decision within thirty days, he shall notify the parties to the dispute in writing of the reasons why a decision cannot be issued within thirty days and of the date by which the decision shall issue. Failure to issue a decision within the thirty-day period or within the additional time period specified in such written notice shall be deemed to constitute a denial of the claim and shall authorize resort to the appeal procedure described below. The decision of the chief executive official or his designee shall be final and conclusive unless an appeal is taken as provided below. (c) Within twenty-one calendar days of the receipt of a written decision or of the failure to issue a decision as stated in the preceding subparagraph, any aggrieved party may file a notice of claim for an adjudicatory hearing with the division of hearing officers or the aggrieved party may file an action directly in a court of competent jurisdiction and shall serve copies thereof upon all other parties in the form and manner prescribed by the rules governing the conduct of adjudicatory proceedings of the division of hearing officers. In the event an aggrieved party exercises his option to file an action directly in court as provided in the previous sentence, the twenty-one day period shall not apply to such filing and the period of filing such action shall be the same period otherwise applicable for filing a civil action in superior court. The appeal shall be referred to a

hearing officer experienced in construction law and shall be prosecuted in accordance with the formal rules of procedure for the conduct of adjudicatory hearings of the division of hearing officers, except as provided below. The hearing officer shall issue a final decision as expeditiously as possible, but in no event more than one hundred and twenty calendar days after conclusion of the adjudicatory hearing, unless the decision is delayed by a request for extension of time for filing post-hearing briefs or other submissions assented to by all parties. Whenever, because an extension of time has been granted, the hearing officer is unable to issue a decision within one hundred and twenty days, he shall notify all parties of the reasons for the delay and the date when the decision will issue. Failure to issue a decision within the one hundred and twenty-day period or within the additional period specified in such written notice shall give the petitioner the right to pursue any legal remedies available to him without further delay.

(d) When the amount in dispute is less than ten thousand dollars, a contractor who is party to the dispute may elect to submit the appeal to a hearing officer experienced in construction law for expedited hearing in accordance with the informal rules of practice and procedure of the division of hearing officers. An expedited hearing under this subparagraph shall be available at the sole option of the contractor. The hearing officer shall issue a decision no later than sixty days following the conclusion of any hearing conducted pursuant to this subparagraph. The hearing officer's decision shall be final and conclusive, and shall not be set aside except in cases of fraud. (2) The commissioner of administration shall require the division of hearings officers to prepare annually a report concerning the construction contract claims submitted to the division during the preceding twelve months, in such form as the commissioner shall prescribe. The report shall contain, at a minimum, the following information: the number of claims submitted; the names of all parties to each such claim; a brief description of the claim; the date of submission and of disposition of the claim; its disposition, whether by settlement, withdrawal, default or written decision; and the number of claims currently pending. The original of the report shall be submitted to the commissioner of administration by January fifteenth, and a copy shall be filed with the state librarian and shall be a public document.

## Chapter 30: Section 39R. Definitions; contract provisions; management and financial statements; enforcement.

Section 39R. (a) The words defined herein shall have the meaning stated below whenever they appear in this section:

- (1) ""Contractor" means any person, corporation, partnership, joint venture, sole proprietorship, or other entity awarded a contract pursuant to sections thirty-eight A %p1/2%p to thirty-eight O, inclusive, of chapter seven and any contract awarded or executed pursuant to section eleven C of chapter twenty-five A, section thirty-nine M of chapter thirty, or sections forty-four A to forty-four H, inclusive, of chapter one hundred and forty-nine, which is for an amount or estimated amount greater than one hundred thousand dollars.
- (2) ""Contract" means any contract awarded or executed pursuant to sections thirty-eight A %p1/2%p to thirty-eight O, inclusive, of chapter seven and any contract awarded or executed pursuant to section eleven C of chapter twenty-five A, section thirty-nine M of chapter thirty, or sections forty-four A through forty-four H, inclusive, of chapter one hundred and forty-nine, which is for amount or estimated amount greater than one hundred thousand dollars.
- (3) ""Records" means books of original entry, accounts, checks, bank statements and all other banking documents, correspondence, memoranda, invoices, computer printouts, tapes, discs, papers and other documents or transcribed information of any type, whether expressed in ordinary or machine language.
- (4) ""Independent Certified Public Accountant" means a person duly registered in good standing and entitled to practice as a certified public accountant under the laws of the place of his residence or principal office and who is in fact independent. In determining whether an accountant is independent with respect to a particular person, appropriate consideration should be given to all

- relationships between the accountant and that person or any affiliate thereof. Determination of an accountant's independence shall not be confined to the relationships existing in connection with the filing of reports with the awarding authority.
- (5) ""Audit", when used in regard to financial statements, means an examination of records by an independent certified public accountant in accordance with generally accepted accounting principles and auditing standards for the purpose of expressing a *certified* opinion thereon, or, in the alternative, a qualified opinion or a declination to express an opinion for stated reasons.
- (6) ""Accountant's Report", when used in regard to financial statements, means a document in which an independent certified public accountant indicates the scope of the audit which he has made and sets forth his opinion regarding the financial statements taken as a whole with a listing of noted exceptions and qualifications, or an assertion to the effect that an overall opinion cannot be expressed. When an overall opinion cannot be expressed the reason therefor shall be stated. An accountant's report shall include as a part thereof a signed statement by the responsible corporate officer attesting that management has fully disclosed all material facts to the independent certified public accountant, and that the audited financial statement is a true and complete statement of the financial condition of the contractor.
- (7) ""Management", when used herein, means the chief executive officers, partners, principals or other person or persons primarily responsible for the financial and operational policies and practices of the contractor.
- (8) Accounting terms, unless otherwise defined herein, shall have a meaning in accordance with generally accepted accounting principles and auditing standards.
- (b) Subsection (a)(2) hereof notwithstanding, every agreement or contract awarded or executed pursuant to sections thirty-eight A %p1/2%p to thirty-eight O, inclusive, of chapter seven, or eleven C of chapter twenty-five A, and pursuant to section thirty-nine M of chapter thirty or to section forty-four A through H, inclusive, of chapter one hundred and forty-nine, shall provide that:
- (1) The contractor shall make, and keep for at least six years after final payment, books, records, and accounts which in reasonable detail accurately and fairly reflect the transactions and dispositions of the contractor, and
- (2) until the expiration of six years after final payment, the office of inspector general, and the commissioner of capital asset management and maintenance shall have the right to examine any books, documents, papers or records of the contractor or of his subcontractors that directly pertain to, and involve transactions relating to, the contractor or his subcontractors, and
- (3) if the agreement is a contract as defined herein, the contractor shall describe any change in the method of maintaining records or recording transactions which materially affect any statements filed with the awarding authority, including in his description the date of the change and reasons therefor, and shall accompany said description with a letter from the contractor's independent certified public accountant approving or otherwise commenting on the changes, and
- (4) if the agreement is a contract as defined herein, the contractor has filed a statement of management on internal accounting controls as set forth in paragraph (c) below prior to the execution of the contract, and
- (5) if the agreement is a contract as defined herein, the contractor has filed prior to the execution of the contracts and will continue to file annually, an audited financial statement for the most recent completed fiscal year as set forth in paragraph (d) below.
- (c) Every contractor awarded a contract shall file with the awarding authority a statement of management as to whether the system of internal accounting controls of the contractor and its subsidiaries reasonably assures that:
- (1) transactions are executed in accordance with management's general and specific authorization;
- (2) transactions are recorded as necessary

- i. to permit preparation of financial statements in conformity with generally accepted accounting principles, and
- ii. to maintain accountability for assets;
- (3) access to assets is permitted only in accordance with management's general or specific authorization; and
- (4) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action was taken with respect to any difference.
- Every contractor awarded a contract shall also file with the awarding authority a statement prepared and signed by an independent certified public accountant, stating that he has examined the statement of management on internal accounting controls, and expressing an opinion as to
- (1) whether the representations of management in response to this paragraph and paragraph (b) above are consistent with the result of management's evaluation of the system of internal accounting controls; and
- (2) whether such representations of management are, in addition, reasonable with respect to transactions and assets in amounts which would be material when measured in relation to the applicant's financial statements.
- (d) Every contractor awarded a contract by the commonwealth or by any political subdivision thereof shall annually file with the commissioner of capital asset management and maintenance during the term of the contract a financial statement prepared by an independent certified public accountant on the basis of an audit by such accountant. The final statement filed shall include the date of final payment. All statements shall be accompanied by an accountant's report. Such statements shall be made available to the awarding authority upon request.
- (e) The office of inspector general, the commissioner of capital asset management and maintenance and any other awarding authority shall enforce the provisions of this section. The commissioner of capital asset management and maintenance may after providing an opportunity for the inspector general and other interested parties to comment, promulgate pursuant to the provisions of chapter thirty A such rules, regulations and guidelines as are necessary to effectuate the purposes of this section. Such rules, regulations and guidelines may be applicable to all awarding authorities. A contractor's failure to satisfy any of the requirements of this section may be grounds for debarment pursuant to section forty-four C of chapter one hundred and forty-nine. (f) Records and statements required to be made, kept or filed under the provisions of this section
- (f) Records and statements required to be made, kept or filed under the provisions of this section shall not be public records as defined in section seven of chapter four and shall not be open to public inspection; provided, however, that such records and statements shall be made available pursuant to the provisions of clause (2) of paragraph

#### **APPENDIX B Commonly-Used Forms**

**Procedure for Payment to Contractors Payment Voucher Input Form** Requisition for Payment (DCAM Form S1b) and Instructions **Monthly Requisition Breakdown (DCAM Form 55) Instructions Regarding Change Orders and Contract Modifications** (DCAM Form 13) **Daily Time and Material Report for Change Orders** Request and Agreement for a Change in the Plans,

**Specifications and/or Contract (DCAM Form 5) Notice of Intent** 

Contractor's Weekly Workforce Report Minorities/Women in Contractor's Weekly Workforce Report **Weekly Payroll Report Form and Statement of Compliance Quarterly Projected Workforce Table** Form for Transfer of Title (Work Not Incorporated, DCAM Form 16)

Certificate of Agency Use and Occupancy -E-1 Certificate of Final Inspection, Release and Acceptance - E-2

## **TECHNICAL SPECIFICATIONS**

#### TABLE OF CONTENTS

#### **Division**

0	GENERAL REQUIREMENTS	SECTION
1	Summary of the Work	01100
	Unit Prices	01220
	Alternates	01230
	Historic Treatment Procedures	01359
	Project Record Documents	01781
2	SITE WORK	
	General Guidelines for Cutting and Patching	02220
3	CONCRETE	
	Cast in Place Concrete	03300
4	MASONRY	
	Concrete Unit Masonry	04816
	Stone Repointing	04926
5	METALS – SEE DRAWINGS	
6	WOOD AND PLASTICS	
	Timber Framing	06130
	Exterior Finish Carpentry	06201
	Historic Wood Repair	06312
7	THERMAL AND MOISTURE PROTECTION	
	Manufactured Roof Specialties	07710
	Joint Sealants	07920
8	DOORS AND WINDOWS	
	Steel Doors	08110
9	FINISHES	
	Exterior Painting	09911
10	SPECIALTIES – NOT USED	
11	EQUIPMENT – NOT USED	
12	FURNISHINGS – NOT USED	
13	SPECIAL CONSTRUCTION – NOT USED	
14	CONVEYANCES – NOT USED	
15	MECHANICAL – SEE DRAWINGS	
16	ELECTRICAL – SEE DRAWINGS	

#### **DRAWING LIST**

Plan Set entitled: "FOUNDATION STABILIZATION – SOUTH EGREMONT VILLAGE SCHOOL", Dated: October 20, 2017; Prepared by: Evelyn Cole Smith Architects, LLC.

Sheet/Drawing Number	Sheet/Drawing Title
T-1	Title Sheet
A-1	Foundation & First Floor Plan
A-2	Roof Plan and Details
A-3	Toilet Room Improvements
S-1	Foundation Plan, Details & Notes
S-2	Foundation Sections

#### **SECTION 01100**

#### **SUMMARY OF THE WORK**

#### **PART 1 - GENERAL**

#### 1.1 SUMMARY

- A. The Contractor shall provide all labor, material, and equipment necessary to complete the South Egremont Village School Foundation Stabilization project.
  - 1. The work generally includes the following:

#### **BASE BID**

- a. Disconnecting utilities and lifting the building;
- b. Removal of a portion of the field stone foundation and installation of a cast in place foundation;
- c. Partial repair and repointing of the stone foundation that is to remain;
- d. Replacement of a portion of the timber sill;
- e. Repair of a portion of the timber sill;
- f. Repair of timber joist in the south classroom;
- g. Installation of new piers in the crawlspace;
- h. Installation of new floor system in the Coat Room.
- i. Repointing the chimney within attic space;
- j. Installation of new clapboards in area of sill replacement;
- k. Installation of new doors, relocation of window and minor interior repairs;

#### ALTERNATE ONE

- a. Renovation of toilet rooms for ADA compliance;
- b. Construction of exterior ramp at side entrance;
- c. Parking striping;
- d. Concrete walkway.
- B. Unless separately awarded to the Contractor by Change Order, The Town of Egremont Department of Public Works will complete the following site work:
  - Trim trees on the east and west sides of the building;
  - Remove biological growth (moss) from the roof;
  - Install insect screening on the rear of the decorative shutter on the face of the building;
  - Other areas of the project site disturbed by the Contractor shall be repaired by the Contractor at no additional cost to the Town.
- C. The work will be completed by August 1, 2018.

- D. The Contractor shall provide all required Site Security measures.
- E. The Contractor shall coordinate with the Town of Egremont and their appointed representative as required to complete the project as specified herein.

#### 1.2 SITE SECURITY

The Contractor shall be required to isolate any dangerous conditions from the public with the use of temporary construction fencing and controls.

#### 1.3 QUALITY ASSURANCE

All work shall be completed in accordance with all local, State and Federal laws, ordinances, rules, regulations and within the guidelines of these specifications and in accordance with the Secretary of the Interior's Standards for Rehabilitation.

#### END OF SECTION

#### **SECTION 01220**

#### **UNIT PRICES**

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#### 1.1 SUMMARY

A. Section includes administrative and procedural requirements for unit prices.

#### 1.2 DEFINITIONS

A. Unit price a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

#### 1.3 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, overhead, and profit.
- B. Measurement and Payment: See individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

#### PART 2 - PRODUCTS (Not Used)

#### PART 3 - EXECUTION

#### 3.1 SCHEDULE OF UNIT PRICES

A.	Unit-Pri	ce No. 1: Remo	oval of unsatis	factory soil and re	placement with	satisfactory	soil material
	1				Dollars (\$	)	per CY.

UNIT PRICES 01220 - 1

Unit-Price No. 2: Rock excavation and replacement w	ith satisfactory soil materia	al.
1.		_) per CY.
Unit-Price No. 3: Timber sill replacement including co	onnectors.	
1.	_ Dollars (\$	_) per LF.
Unit-Price No. 4: Timber joist replacement including of	connectors.	
1.		_) per LF.
Unit-Price No. 5: East side temporary wood stair, land	ling, guard and handrails.	
1.	_ Dollars (\$	_) per unit.
	1. Unit-Price No. 3: Timber sill replacement including constant of the sill replacement including constant of the sill replacement including of the sill replacement in sill replacement including of the sill replacement in sill replacement in si	Unit-Price No. 3: Timber sill replacement including connectors.  1 Dollars (\$

END OF SECTION 01220

UNIT PRICES 01220 - 2

#### **SECTION 01230**

#### **ALTERNATES**

#### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section includes administrative and procedural requirements for alternates.

#### 1.2 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
  - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
  - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

#### 1.3 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
  - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated revisions to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

ALTERNATES 01230 - 1

#### PART 2 - PRODUCTS (Not Used)

#### **PART 3 - EXECUTION**

#### 3.1 SCHEDULE OF ALTERNATES

- A. Alternate No. One: ADA Accessibility Improvements.
  - 1. Base Bid: Foundation stabilization.
  - 2. Alternate: Toilet room ADA improvements, exterior ramp, parking striping and miscellaneous other improvements as delineated in the drawings.

END OF SECTION 01230

ALTERNATES 01230 - 2

#### **SECTION 01351**

#### SPECIAL PROCEDURES FOR HISTORIC TREATMENT

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes general protection and treatment procedures for the entire Project and the following specific work:
  - 1. Repair and replacement of historic fabric.

#### 1.2 DEFINITIONS

- A. Consolidate: To strengthen loose or deteriorated materials in place.
- B. Dismantle: To disassemble and detach items by hand from existing construction to the limits indicated, using small hand tools and small one-hand power tools, so as to protect nearby historic surfaces; and legally dispose of dismantled items off-site, unless indicated to be salvaged or reinstalled.
- C. Existing to Remain: Existing items that are not to be removed or dismantled.
- D. Historic: Spaces, areas, rooms, surfaces, materials, finishes, and overall appearance which are important to the successful preservation and reconstruction as determined by the Architect. Designated historic areas and surfaces are generally described below.
  - 1. Rehabilitation Zones (Building Exterior): Areas of significant architectural importance, integrity, and visibility; to be preserved and restored consistent with the remaining historic fabric and to the extent shown on Drawings:
- E. Match: To blend with adjacent construction and manifest no apparent difference in material type, species, cut, form, detail, color, grain, texture, or finish; as approved by the Architect.
- F. Reconstruct: To remove existing item, replicate damaged or missing components, and reinstall in original position.
- G. Refinish: To remove existing finishes to base material and apply new finish to match original, or as otherwise indicated.
- H. Reinstall: To protect removed or dismantled item, repair and clean it as indicated for reuse, and reinstall it in original position, or where indicated.

- I. Remove: Specifically for historic spaces, areas, rooms, and surfaces, the term means to detach an item from existing construction to the limits indicated, using hand tools and hand-operated power equipment, and legally dispose of it off-site, unless indicated to be salvaged or reinstalled.
- J. Repair: To correct damage and defects, retaining existing materials, features, and finishes while employing as little new material as possible. Includes patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading materials.
- K. Replace: To remove, duplicate, and reinstall entire item with new material. The original item is the pattern for creating duplicates unless otherwise indicated.
- L. Replicate: To reproduce in exact detail, materials, and finish, unless otherwise indicated
- M. Reproduce: To fabricate a new item, accurate in detail to the original, and in either the same or a similar material as the original, unless otherwise indicated.
- N. Restore: To consolidate, replicate, reproduce, repair, and refinish as required to achieve the indicated results.
- O. Retain: To keep existing items that are not to be removed or dismantled.
- P. Reversible: New construction work, treatments, or processes that can be removed or undone in the future without damaging historic materials, unless otherwise indicated.
- Q. Salvage: To protect removed or dismantled items and deliver them to Owner.
- R. Stabilize: To provide structural reinforcement of unsafe or deteriorated items while maintaining the essential form as it exists at present; also, to reestablish a weather-resistant enclosure.
- S. Strip: To remove existing finish down to base material, unless otherwise indicated.

#### 1.3 QUALITY ASSURANCE

- A. Historic Treatment Specialist Qualifications: An experienced firm regularly engaged in historic treatments similar in nature, materials, design, and extent to this work as specified in each section, and that has completed a minimum of five recent projects with a record of successful in-service performance that demonstrate the firm's qualifications to perform this work.
  - 1. Field Supervisor Qualifications: Full-time supervisors experienced in historic treatment work similar in nature, material, design, and extent to that indicated for this Project. Supervisors shall be on Project site during times that historic treatment work is in progress. Supervisors shall not be changed during Project except for causes beyond the control of the specialist firm.

- 2. Worker Qualification: Persons who are experienced in historic treatment work of types they will be performing.
- B. Regulatory Requirements: Comply with governing EPA notification regulations before beginning removal and dismantling work. Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Standards: Comply with ANSI/ASSE A10.6.
- D. Historic Treatment Preconstruction Conference: Conduct conference at Project site.

#### 1.4 STORAGE AND PROTECTION OF HISTORIC MATERIALS

- A. Salvaged Historic Materials:
  - 1. Clean only loose debris from salvaged historic items unless more extensive cleaning is indicated.
  - 2. Pack or crate items after cleaning; cushion against damage during handling. Label contents of containers.
  - 3. Store items in a secure area until delivery to Owner.
  - 4. Transport items to Owner's storage area on-site.
  - 5. Protect items from damage during transport and storage.
- B. Historic Materials for Reinstallation:
  - 1. Repair and clean historic items as indicated and to functional condition for reuse.
  - 2. Pack or crate items after cleaning and repairing; cushion against damage during handling. Label contents of containers.
  - 3. Protect items from damage during transport and storage.
  - 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment unless otherwise indicated. Provide connections, supports, and miscellaneous materials to make item functional for use indicated.
- C. Existing Historic Materials to Remain: Protect construction indicated to remain against damage and soiling from construction work. Where permitted by Architect, items may be dismantled and taken to a suitable, protected storage location during construction work and reinstalled in their original locations after historic treatment and construction work in the vicinity is complete.
- D. Storage and Protection: When taken from their existing locations, catalog and store historic items within a weathertight enclosure where they are protected from wetting by rain, snow, condensation, or ground water, and from freezing temperatures.
  - 1. Identify each item with a nonpermanent mark to document its original location. Indicate original locations on plans elevations, sections, or photographs by annotating the identifying marks.
  - 2. Secure stored materials to protect from theft.

#### 1.5 PROJECT CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to removal and dismantling area. Conduct removal and dismantling work so Owner's operations will not be disrupted.
- B. Hazardous Materials: Hazardous materials are present in construction affected by removal and dismantling work. A report on the presence of hazardous materials is on file for review and use. Examine report to become aware of locations where hazardous materials are present.
  - 1. Hazardous material remediation is specified elsewhere in the Contract Documents.
  - 2. Do not disturb hazardous materials or items suspected of containing hazardous materials except under procedures specified elsewhere in the Contract Documents.
- C. Storage or sale of removed or dismantled items on-site is not permitted unless otherwise indicated.

#### PART 2 - PRODUCTS (Not Used)

#### **PART 3 - EXECUTION**

#### 3.1 EXAMINATION

- A. Preparation for Removal and Dismantling: Examine construction to be removed or dismantled to determine best methods to safely and effectively perform removal and dismantling work. Examine adjacent work to determine what protective measures will be necessary. Make explorations, probes, and inquiries as necessary to determine condition of construction to be removed or dismantled and location of utilities and services to remain that may be hidden by construction that is to be removed or dismantled.
  - 1. Verify that affected utilities have been disconnected and capped.
  - 2. Inventory and record the condition of items to be removed and dismantled for reinstallation or salvage.
  - 3. Before removal or dismantling of existing building elements that will be reproduced or duplicated in final Work, make permanent record of measurements, materials, and construction details required to make exact reproduction.
  - 4. Engage a professional engineer to survey condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures as a result of removal and dismantling work.

#### 3.2 PROTECTION, GENERAL

- A. Ensure that supervisory personnel are on-site and on duty when historic treatment work begins and during its progress.
- B. Protect persons, motor vehicles, surrounding surfaces of building, building site, plants, and surrounding buildings from harm resulting from historic treatment procedures.
  - 1. Use only proven protection methods, appropriate to each area and surface being protected.
  - 2. Provide barricades, barriers, and temporary directional signage to exclude public from areas where historic treatment work is being performed.
  - 3. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during course of historic treatment work.
  - 4. Contain dust and debris generated by removal and dismantling work and prevent it from reaching the public or adjacent surfaces.
  - 5. Provide shoring, bracing, and supports as necessary. Do not overload structural elements
  - 6. Protect floors and other surfaces along haul routes from damage, wear, and staining.

#### C. Temporary Protection of Historic Materials:

- 1. Protect existing historic materials with temporary protections and construction. Do not deface or remove existing materials.
- 2. Do not attach temporary protection to historic surfaces except as indicated as part of the historic treatment program and approved by Architect.
- D. Comply with each product manufacturer's written instructions for protections and precautions. Protect against adverse effects of products and procedures on people and adjacent materials, components, and vegetation.

#### E. Utility and Communications Services:

- 1. Notify the Owner, Architect, and authorities having jurisdiction, owning or controlling wires, conduits, pipes, and other services affected by the historic treatment work before commencing operations.
- 2. Disconnect and cap pipes and services as required by authorities having jurisdiction, as required for the historic treatment work.
- 3. Maintain existing services unless otherwise indicated; keep in service, and protect against damage during operations. Provide temporary services during interruptions to existing utilities.
- F. Existing Drains: Prior to the start of work in an area, test drainage system to ensure that it is functioning properly. Notify Architect immediately of inadequate drainage or blockage. Do not begin work in an area until the drainage system is in working order.

- 1. Prevent solids such as stone or mortar residue from entering the drainage system. Clean out drains and drain lines that become sluggish or blocked by sand or other materials resulting from historic treatment work.
- 2. Protect drains from pollutants. Block drains or filter out sediments, allowing only clean water to pass.

## 3.3 PROTECTION DURING APPLICATION OF CHEMICALS

- A. Protect motor vehicles, surrounding surfaces of building being restored, building site, plants, and surrounding buildings from harm or damage resulting from applications of chemical cleaners and paint removers.
- B. Cover adjacent surfaces with protective materials that are proven to resist chemicals selected for Project unless chemicals being used will not damage adjacent surfaces as indicated in historic treatment program. Use covering materials and masking agents that are waterproof, UV-resistant, and will not stain or leave residue on surfaces to which they are applied. Apply protective materials according to manufacturer's written instructions. Do not apply liquid masking agents or adhesives to painted or porous surfaces. When no longer needed, promptly remove protective materials staining.
- C. Do not apply chemicals during winds of sufficient force to spread them to unprotected surfaces.
- D. Neutralize and collect alkaline and acid wastes and legally dispose of off Owner's property.
- E. Collect and dispose of runoff from chemical operations by legal means and in a manner that prevents soil contamination, soil erosion, undermining of paving and foundations, damage to landscaping, or water penetration into building interior.

## 3.4 PROTECTION FROM FIRE

- A. General: Follow fire-prevention plan and the following.
  - 1. Comply with NFPA 241 requirements unless otherwise indicated.
  - 2. Remove and keep area free of combustibles including, rubbish, paper, waste, and chemicals, except to the degree necessary for the immediate work.
    - a. If combustible material cannot be removed, provide fire blankets to cover such materials.
  - 3. Prohibit smoking by all persons within the Project work and staging areas.
- B. Heat-Generating Equipment and Combustible Materials: Comply with the following procedures while performing work with heat-generating equipment or highly combustible materials, including welding, torch-cutting, soldering, brazing, paint

removal with heat, or other operations where open flames or implements utilizing high heat or combustible solvents and chemicals are anticipated.

- 1. Obtain Owner's approval for operations involving use of open-flame or welding or other high-heat equipment. Notify Owner before each occurrence, indicating location of such work.
- 2. As far as practical, restrict heat-generating equipment to shop areas or outside the building.
- 3. Do not perform work with heat-generating equipment in or near rooms or in areas where flammable liquids or explosive vapors are present or thought to be present. Use a combustible gas indicator test to ensure that the area is safe.
- 4. Use fireproof baffles to prevent flames, sparks, hot gasses, or other high-temperature material from reaching surrounding combustible material.
- 5. Prevent the spread of sparks and particles of hot metal through open windows, doors, holes, and cracks in floors, walls, ceilings, roofs, and other openings.
- C. Fire Extinguishers, Fire Blankets, and Rag Buckets: Maintain fire extinguishers, fire blankets, and rag buckets for disposal of rags with combustible liquids. Maintain each as suitable for the type of fire risk in each work area. Ensure that nearby personnel and the fire watch are trained in fire-extinguisher and blanket operation.

## 3.5 GENERAL HISTORIC TREATMENT

- A. Ensure that supervisory personnel are present when historic treatment work begins and during its progress.
- B. Halt the process of deterioration and stabilize conditions, unless otherwise indicated. Perform work as indicated on Drawings. Follow the procedures in subparagraphs below and procedures approved in historic treatment program.
  - 1. Retain as much existing material as possible; repair and consolidate rather than replace.
  - 2. Use additional material or structure to reinforce, strengthen, prop, tie, and support existing material or structure.
  - 3. Use reversible processes wherever possible.
  - 4. Use historically accurate repair and replacement materials and techniques unless otherwise indicated.
- C. Notify Architect of visible changes in the integrity of material or components whether due to environmental causes including biological attack, UV degradation, freezing, or thawing; or due to structural defects including cracks, movement, or distortion.
  - 1. Do not proceed with the work in question until directed by Architect.
- D. Where missing features are indicated to be repaired or replaced, provide features whose designs are based on accurate duplications rather than on conjectural designs, subject to the approval of Architect.

- E. Where Work requires existing features to be removed or dismantled and reinstalled, perform these operations without damage to the material itself, to adjacent materials, or to the substrate.
- F. Identify new and replacement materials and features with permanent marks hidden in the completed work to distinguish them from original materials. Record a legend of identification marks and the locations of the items on Record Drawings.

## 3.6 HISTORIC REMOVAL AND DISMANTLING

- A. General: Have removal and dismantling work performed by a qualified historic treatment specialist.
- B. Perform work in accordance with the historic treatment program.
- C. Water-Mist Sprinkling: Use water-mist sprinkling and other wet methods to control dust only with adequate, approved procedures and equipment that ensure that such water will not create a hazard or adversely affect other building areas or materials.

# D. Anchorages:

- 1. Remove anchorages associated with removed items.
- 2. Dismantle anchorages associated with dismantled items.
- 3. In non-historic surfaces, patch holes created by anchorage removal or dismantling in accordance with the requirements for new work.
- 4. In historic surfaces, patch or repair holes created by anchorage removal or dismantling in accordance with Section specific to the historic surface being patched.

## **END OF SECTION 01351**

#### **SECTION 01781**

#### PROJECT RECORD DOCUMENTS

#### PART 1 - GENERAL

#### 1.1 SUMMARY

This Section includes administrative and procedural requirements for Project Record Drawings.

#### 1.2 SUBMITTALS

Record Drawings: Comply with the following:

- A. Number of Copies: Submit copies of Record Drawings as follows:
- B. Initial Submittal: Submit one (1) set of marked-up Record Prints. Architect will initial and date each print and mark whether general scope of changes, additional information recorded, and quality of drafting are acceptable. Architect will return prints for revisions, organizing into sets, printing, binding, and final submittal.
- C. Final Submittal: Submit one (1) set of revised Record Prints.

### **PART 2 – PRODUCTS**

## 2.1 RECORD DRAWINGS

- A. Record Prints: Maintain one set of blue- or black-line white prints of the Contract Drawings and Shop Drawings.
- B. Preparation: Mark Record Prints to show the actual installation. Require individual or entity who obtained record data, whether individual or entity is installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.
  - 1. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
  - 2. Accurately record information in an understandable drawing technique.
  - 3. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
- C. Content: Types of items requiring marking include, but are not limited to, the following:

- 1. Dimensional ties from underground utilities to permanent objects found on the original drawings and in the field.
- 2. Locations and depths of underground utilities.
- 3. Routing of piping and conduits.
- 4. Changes made by Change Order or Construction Change Directive.
- 5. Details not on the original Contract Drawings.
- 6. Field records for variable and concealed conditions.
- 7. Record information on the Work that is shown only schematically.
- D. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.
- E. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at the same location.
- F. Mark important additional information that was either shown schematically or omitted from original Drawings.
- G. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.

# **PART 3 - EXECUTION**

## 3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.
- B. Maintenance of Record Documents and Samples: Store Record Documents and Samples in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Architect's reference during normal working hours.

## **END OF SECTION**

#### **SECTION 02220**

## GENERAL GUIDELINES FOR CUTTING AND PATCHING ORIGINAL WORK

#### PART 1 - GENERAL

## 1.01 SUMMARY

A. This procedure includes general guidelines to follow when performing cutting and patching original work.

# 1.02 DEFINITIONS

- A. "Cutting and patching" includes cutting into existing construction to provide for the installation or performance of other work and subsequent fitting and patching required to restore surfaces to their original condition.
  - 1. Cutting and patching is performed for coordination of the work, to uncover work for access or inspection, to obtain samples for testing, to permit alterations to be performed or for other similar purposes.
  - 2. Cutting and patching performed during the manufacture of products, or during the initial fabrication, erection or installation processes is not considered to be "cutting and patching" under this definition. Drilling of holes to install fasteners and similar operations are also not considered to be "cutting and patching".
  - 3. "Selective Demolition" is recognized as related-but-separate category of work, which may or may not require cutting and patching as defined in this procedure.

#### 1.03 SUBMITTALS

- A. Procedural Proposal for Cutting and Patching: Where prior approval of cutting and patching is required, submit proposed procedures for this work well in advance of the time work will be performed and request approval to proceed. Include the following information, as applicable, in the submittal:
  - 1. Describe nature of the work and how it is to be performed, indicating why cutting and patching cannot be avoided. Describe anticipated results of the work in terms of changes to existing work, including structural, operational and visual changes as well as other significant elements.

- 2. List products to be used and firms, including qualifications, that will perform work.
- 3. Give dates when work is expected to be performed.
- 4. List utilities that will be disturbed or otherwise be affected by work, including those that will be relocated and those that will be out-of-service temporarily. Indicate how long utility service will be disrupted.
- 5. When cutting and patching of structural work involves the addition of reinforcement, submit details and engineering calculations to show how that reinforcement is integrated with original structure to satisfy requirements.
- 6. All welding and/or hotwork requires formal notification to the Owner no later than the first thing in the morning of each day such work is to be done. No welding or hot work is permitted without such prior notification.

# 1.04 QUALITY ASSURANCE

- A. General Contractor shall do all cutting and patching of wall surface for the removal, relocation of or new piping, conduit, electrical boxes, where pipes have been removed or abandoned.
- B. Requirements for Structural Work: Do not cut and patch structural work in a manner that would result in a reduction of load-carrying capacity or of load-deflection ratio. Prior to such work, obtain approval of project's Structural Engineer.
- C. Before cutting and patching the following categories of work, obtain the Owner's or Owner's Representative's approval to proceed.
  - 1. Structural steel.
  - 2. Miscellaneous structural metals, including lintels, equipment supports, stair systems and similar categories of work.
  - 3. Structural concrete.
  - 4. Foundation construction.
  - 5. Timber and primary wood framing.
  - 6. Structural decking.
  - 7. Bearing and retaining walls.
  - 8. Piping, ductwork, vessels and equipment.
  - 9. Shoring, bracing, and sheeting.
  - 10. Primary operational systems and equipment.
  - 11. Water/moisture/vapor/air/smoke barriers, membranes and flashings.

- 12. Noise and vibration control elements and systems.
- 13. Control, communication, conveying, and electrical wiring systems.
- D. Visual Requirements: Do not cut and patch work exposed on the building's exterior or in its occupied spaces, in a manner that would, in the Owner's Representative's opinion, result in lessening the building's aesthetic qualities. Do not cut and patch work in a manner that would result in substantial visual evidence of cut and patch work. Remove and replace work judged by the Owner's Representative to be cut and patched in a visually unsatisfactory manner.
- E. Retain a recognized experienced and specialized firm to cut and patch the following categories of exposed work.
  - 1. Processed concrete finishes.
  - 2. Stonework and stone masonry.
  - 3. Ornamental metal.
  - 4. Matched-veneer woodwork.
  - 5. Roofing.

#### **PART 2 - PRODUCTS**

#### 2.01 MATERIALS

- A. General: Except as otherwise indicated, or as directed by the Owner's Representative, use materials for cutting and patching that are identical to existing materials. If identical materials are not available, or cannot be used, use materials that match existing adjacent surfaces to the fullest extent possible with regard to visual effect. Use materials for cutting and patching that will result in equal-or-better performance characteristics.
  - l. The use of a trade name and suppliers name and address is to indicate a possible source of the product. Products of the same type from other sources shall not be excluded provided they possess like physical and functional characteristics.

## **PART 3 - EXECUTION**

## 3.01 EXAMINATION

A. Before cutting, examine the surfaces to be cut and patched and the conditions under which the work is to be performed. If unsafe or otherwise unsatisfactory conditions are encountered, take corrective action before proceeding with the work.

1. Before the start of cutting work, meet at the work site with all parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict between the various trades. Coordinate layout of the work and resolve potential conflicts before proceeding with the work.

#### 3.02 PREPARATION

- A. Temporary Support: To prevent failure provide temporary support of work to be cut. Do not endanger other work. Provide adequate protection of other work during cutting and patching, to prevent damage; and provide protection of the work from adverse weather exposure.
- B. Protection: Protect other work during cutting and patching to prevent damage. Provide protection from adverse weather conditions of that part of the project that may be exposed during cutting and patching operations.
  - l. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

## 3.03 ERECTION, INSTALLATION, APPLICATION

- A. General: Employ skilled workers to perform cutting and patching work. Except as otherwise indicated or as approved by the Owner's Representative, proceed with cutting and patching at the earliest feasible time and complete work without delay.
- B. Cutting: Cut the work using methods that are least likely to damage work to be retained or adjoining work.
  - l. In general, where cutting is required use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut through concrete and masonry using a cutting machine such as a Carborundum saw or core drill to insure a neat hole.
  - 2. Cut holes and slots neatly to size required with minimum disturbance of adjacent work. To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces. Temporarily cover openings when not in use.
  - 3. Comply with other applicable requirements where cutting and patching requires excavating and backfilling.
  - 4. By-pass utility services such as pipe and conduit, before cutting, where such utility services are shown or required to be

removed, relocated or abandoned. Cut-off conduit and pipe in walls or partitions to be removed. After by-pass and cutting, cap, valve or plug and seal tight remaining portion of pipe and conduit to prevent entrance of moisture or other foreign matter.

- C. Patching: Patch with seams which are durable and as invisible as possible. Comply with specified tolerances for the work.
  - 1. Where feasible, inspect and test patched areas to demonstrate integrity of work.
  - 2. Restore exposed finishes of patched areas and where necessary extend finish restoration into retained adjoining work in a manner which will eliminate evidence of patching and refinishing. Where patch occurs in a smooth painted surface, extend final paint coat over entire unbroken surface containing patch, after patched area has received prime and base coats.
  - 3. Where removal of walls or partitions extends one finished area into another finished area, patch and repair floor and wall surfaces in the new space to provide an even surface of uniform color and appearance. If necessary to achieve uniform color and appearance, remove existing floor and wall coverings and replace with new materials
    - a. Where patch occurs in a smooth painted surface, extend final paint coat over entire unbroken surface containing patch, after patched area has received prime and base coat.
  - 4. Patch, repair or rehang existing ceilings as necessary to provide an even plane surface of uniform appearance.
- D. Exterior Trim and Finish Work:
  - 1. Only deteriorated sections of material shall be removed and replaced.
  - 2. New material shall be joined to the existing with a lapped scarf joint. The angle of the scarf joint shall be oriented so that if moisture should enter into the joint, it will run towards the outside.

#### 3.04 ADJUSTING/CLEANING

A. Thoroughly clean areas and adjacent spaces soiled due to the work performed or used as access to work. Remove completely paint, mortar, oils, putty and items of similar nature. Thoroughly clean piping, conduit and similar features before painting or other finishing is applied. Restore damaged pipe covering to its original condition.

# **END OF SECTION**

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## **SECTION 03300**

## CAST-IN-PLACE CONCRETE

#### PART 1 - GENERAL

## 1.1 SUMMARY

A. Section includes cast-in-place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes.

## 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Design Mixtures: For each concrete mixture.
- C. Steel Reinforcement Shop Drawings: Placing drawings that detail fabrication, bending, and placement.

## 1.3 INFORMATIONAL SUBMITTALS

- A. Material certificates.
- B. Material test reports.

# 1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
  - 1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities."
- B. Testing Agency Qualifications: An independent agency qualified according to ASTM C 1077 and ASTM E 329 for testing indicated.
- C. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:
  - 1. ACI 301, "Specifications for Structural Concrete," Sections 1 through 5.

2. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."

#### **PART 2 - PRODUCTS**

## 2.1 FORM-FACING MATERIALS

- A. Smooth-Formed Finished Concrete: Form-facing panels that will provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.
- B. Rough-Formed Finished Concrete: Plywood, lumber, metal, or another approved material. Provide lumber dressed on at least two edges and one side for tight fit.

# 2.2 STEEL REINFORCEMENT

- A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed.
- B. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire reinforcement in place. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice.
- C. Adhesive Anchor Systems: Epoxy coated reinforcing bars to be drilled and grouted into existing masonry or concrete where indicated.
- D. Mechanical Couplers: use the following mechanical couplers, or approved equal, for the corresponding steel reinforcing bar size.
  - 1. Dayton Superior BarLock® Coupler System
  - 2. LENTON® LOCK B-Series Mechanical Rebar Splicing System

# 2.3 CONCRETE MATERIALS

- A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source, throughout Project:
  - 1. Portland Cement: ASTM C 150, Type I/II, gray. Supplement with the following:
    - a. Fly Ash: ASTM C 618, Class F.
    - b. Ground Granulated Blast-Furnace Slag: ASTM C 989, Grade 100 or 120.
- B. Normal-Weight Aggregates: ASTM C 33, graded.
  - 1. Maximum Coarse-Aggregate Size: 3/4 inch nominal.

- 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- C. Water: ASTM C 94/C 94M.

## 2.4 ADMIXTURES

- A. Air-Entraining Admixture: ASTM C 260.
- B. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and that will not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.
  - 1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
  - 2. Retarding Admixture: ASTM C 494/C 494M, Type B.
  - 3. Plasticizing and Retarding Admixture: ASTM C 1017/C 1017M, Type II.

## 2.5 CURING MATERIALS

- A. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.
- B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- C. Water: Potable.
- D. Clear, Solvent-Borne, Membrane-Forming Curing and Sealing Compound: ASTM C 1315, Type 1, Class A.
  - 1. VOC Content: Curing and sealing compounds shall have a VOC content of 200 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

## 2.6 CONCRETE MIXTURES

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301.
- B. Cementitious Materials: Use fly ash, pozzolan, ground granulated blast-furnace slag, and silica fume as needed to reduce the total amount of portland cement, which would otherwise be used, by not less than 20 percent.
- C. Admixtures: Use admixtures according to manufacturer's written instructions.

- 1. Use water-reducing or plasticizing admixture in concrete, as required, for placement and workability.
- 2. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
- 3. Use water-reducing admixture in pumped concrete, concrete for heavy-use industrial slabs and parking structure slabs, concrete required to be watertight, and concrete with a water-cementitious materials ratio below 0.50.

# D. Proportion normal-weight concrete mixture as follows:

- 1. Minimum Compressive Strength: 3500 psi at 28 days.
- 2. Maximum Water-Cementitious Materials Ratio: 0.45.
- 3. Slump Limit: 5 inches for concrete with verified slump of 2 to 4 inches before adding plasticizing admixture, plus or minus 1 inch.
- 4. Air Content: 6 percent, plus or minus 1.5 percent at point of delivery for 3/4-inch nominal maximum aggregate size.
- 5. Air Content: Do not allow air content of trowel-finished floors to exceed 3 percent.

## 2.7 FABRICATING REINFORCEMENT

A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

## 2.8 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M, and furnish batch ticket information.
  - 1. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.

## **PART 3 - EXECUTION**

#### 3.1 FORMWORK

- A. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.
- B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.
- C. Chamfer exterior corners and edges of permanently exposed concrete.

#### 3.2 EMBEDDED ITEMS

A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.

## 3.3 STEEL REINFORCEMENT

A. General: Comply with CRSI's "Manual of Standard Practice" for placing reinforcement.

## 3.4 CONCRETE PLACEMENT

- A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.
- B. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation.
  - 1. Consolidate placed concrete with mechanical vibrating equipment according to ACI 301.
- C. Cold-Weather Placement: Comply with ACI 306.1.
- D. Hot-Weather Placement: Comply with ACI 301.

#### 3.5 FINISHING FORMED SURFACES

- A. Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defects repaired and patched. Remove fins and other projections that exceed specified limits on formed-surface irregularities.
  - 1. Apply to concrete surfaces not exposed to public view.
- B. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defects. Remove fins and other projections that exceed specified limits on formed-surface irregularities.
  - 1. Apply to concrete surfaces exposed to public view.
- C. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces unless otherwise indicated.

## 3.6 CONCRETE PROTECTING AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 for hot-weather protection during curing.
- B. Evaporation Retarder: Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.
- C. Cure concrete according to ACI 308.1, by one or a combination of the following methods:
  - 1. Moisture Curing: Keep surfaces continuously moist for not less than seven days.
  - 2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
  - 3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.
    - a. Removal: After curing period has elapsed, remove curing compound without damaging concrete surfaces by method recommended by curing compound manufacturer.
  - 4. Curing and Sealing Compound: Apply uniformly to floors and slabs indicated in a continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Repeat process 24 hours later and apply a second coat. Maintain continuity of coating and repair damage during curing period.

## 3.7 CONCRETE SURFACE REPAIRS

A. Defective Concrete: Repair and patch defective areas when approved by Architect. Remove and replace concrete that cannot be repaired and patched to Architect's approval.

# 3.8 FIELD QUALITY CONTROL

A. Notify architect of record a minimum of 48 hours prior to slab-on-grade placement for inspection of steel reinforcing.

- 1. Steel Reinforcement Placement: The Contractor shall anticipate one (1) inspection of the steel reinforcing throughout the project.
  - a. One (1) for footings and concrete foundation repair.
- B. When architect reports that steel reinforcing does not comply with approved shop drawings, slab placement shall not begin until reinforcing complies with approved shop drawings.
- C. Testing and Inspecting: Contractor will engage a qualified testing and inspecting agency to perform field tests and prepare test reports.
- D. Concrete Tests: Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:
  - a. The Contractor shall anticipate one (1) test on concrete for slump, air content, and compressive strength.
  - 2. Slump: ASTM C 143; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
  - 3. Air Content: ASTM C 231, pressure method, for normal-weight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
  - 4. Compressive-Strength Tests: ASTM C 39; test one field cured cylinder at 7 days and one cylinder at 28 days.
  - 5. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
  - 6. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect. The costs associated with additional testing will not be considered for additional payment.

# **END OF SECTION 03300**

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## **SECTION 04816**

#### CONCRETE UNIT MASONRY ASSEMBLIES

#### PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section Includes:
  - 1. Concrete masonry units (CMU's).

## 1.2 ACTION SUBMITTALS

A. Product Data: For each type of product indicated.

# 1.3 INFORMATIONAL SUBMITTALS

A. Mix Designs: For each type of grout. Include description of type and proportions of ingredients.

# 1.4 OUALITY ASSURANCE

A. Masonry Standard: Comply with ACI 530.1/ASCE 6/TMS 602 unless modified by requirements in the Contract Documents.

#### 1.5 PROJECT CONDITIONS

- A. Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Comply with cold-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.
- B. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.

# **PART 2 - PRODUCTS**

## 2.1 GROUT MATERIALS

A. Portland Cement: ASTM C 150, Type I or II, except Type III may be used for cold-weather construction.

- B. Aggregate for Grout: ASTM C 404.
- C. Water: Potable.

## 2.2 GROUT MIXES

- A. General: Do not use admixtures, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures unless otherwise indicated.
  - 1. Do not use calcium chloride in grout.
- B. Grout for Unit Masonry: Comply with ASTM C 476.
  - 1. Use grout of type indicated or, if not otherwise indicated, of type (fine or coarse) that will comply with Table 1.15.1 in ACI 530.1/ASCE 6/TMS 602 for dimensions of grout spaces and pour height.
  - 2. Proportion grout to for a 2000 psi compressive strength.
  - 3. Provide grout with a slump of 8 to 11 inches as measured according to ASTM C 143/C 143M.

#### **PART 3 - EXECUTION**

#### 3.1 LAYING MASONRY WALLS

A. Fill cores in hollow CMUs with grout as indicated.

# 3.2 FIELD QUALITY CONTROL

- A. Testing and Inspecting: Owner will engage special inspectors to perform tests and inspections and prepare reports. Allow inspectors access to scaffolding and work areas, as needed to perform tests and inspections. Retesting of materials that fail to meet specified requirements shall be done at Contractor's expense.
- B. Grout Test (Compressive Strength): For each mix provided, according to ASTM C 1019.

# 3.3 MASONRY WASTE DISPOSAL

A. Excess Masonry Waste: Remove excess clean masonry waste and other masonry waste, and legally dispose of off Owner's property.

#### **END OF SECTION 04816**

## **SECTION 04926**

#### STONE REPOINTING

#### PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Repointing joints with mortar.

## 1.3 UNIT PRICES

- A. Work of this Section is affected by unit prices specified in Section 01270 "Unit Prices."
  - 1. Unit prices apply to additions to and deletions from Work as authorized by Change Orders.

## 1.4 DEFINITIONS

- A. Low-Pressure Spray: 100 to 400 psi
- B. Rift may be obscure in igneous rocks such as granite. Often it is obvious as with bedding planes in many sedimentary stones.
- C. Rift: The most pronounced direction of splitting or cleavage of a stone.

## 1.5 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site
  - 1. Review methods and procedures related to repointing stonework including, but not limited to, the following:
    - a. Verify stone repointing specialist's personnel, equipment, and facilities needed to make progress and avoid delays.
    - b. Materials, material application, sequencing, tolerances, and required clearances.

- c. Quality-control program.
- d. Coordination with building occupants.

# 1.6 SEQUENCING AND SCHEDULING

- A. Order sand for pointing mortar immediately after approval of mockup. Take delivery of and store at Project site enough quantity to complete Project.
- B. Work Sequence: Perform stone repointing work in the following sequence, which includes work specified in this and other Sections:
  - 1. Remove plant growth.
  - 2. Inspect masonry for open mortar joints and permanently or temporarily point them before cleaning to prevent the intrusion of water and other cleaning materials into the wall.
  - 3. Remove paint.
  - 4. Clean stone.
  - 5. Rake out mortar from joints surrounding stone to be replaced and from joints adjacent to stone repairs along joints.
  - 6. Repair stonework, including replacing existing stone with new stone.
  - 7. Rake out mortar from joints to be repointed.
  - 8. Point mortar joints.
  - 9. After repairs and repointing have been completed and cured, perform a final cleaning to remove residues from this work.

## 1.7 ACTION SUBMITTALS

- A. Samples for Initial Selection: For the following:
  - 1. Pointing Mortar: Submit sets of mortar for pointing in the form of sample mortar strips, 6 inches long by 1/2 inch wide, set in aluminum or plastic channels.
    - a. Have each set contain a close color range of at least three Samples of different mixes of colored sands and cements that produce a mortar matching the existing, cleaned mortar when cured and dry.
    - b. Submit with precise measurements on ingredients, proportions, gradations, and source of colored sands from which each Sample was made.
  - 2. Sand Type Used for Pointing Mortar: Minimum 8 oz. of each in plastic screw-top iars.
  - 3. Include similar Samples of accessories involving color selection.

#### 1.8 INFORMATIONAL SUBMITTALS

A. Qualification Data: For stone repointing specialist.

B. Preconstruction Test Reports: For existing mortar.

# 1.9 QUALITY ASSURANCE

- A. Stone Repointing Specialist Qualifications: Engage an experienced stone repointing firm to perform work of this Section. Firm shall have completed work similar in material, design, and extent to that indicated for this Project with a record of successful in-service performance. Experience in only installing standard unit masonry or new stone masonry is insufficient experience for stone repointing work.
- B. Mockups: Prepare mockups of stone repointing to demonstrate aesthetic effects and to set quality standards for materials and execution.
  - 1. Repointing: Rake out joints in two separate areas, each approximately 18 inches high by 24 inches wide for each type of repointing required, and repoint one of the areas.
  - 2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
  - 3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

# 1.10 PRECONSTRUCTION TESTING

1. Existing Mortar: Test according to ASTM C 295/C 295M, modified as agreed by testing service and Architect for Project requirements, to determine proportional composition of original ingredients, sizes and colors of aggregates, and approximate strength.

# 1.11 DELIVERY, STORAGE, AND HANDLING

- A. Deliver packaged materials to Project site in manufacturer's original and unopened containers, labeled with manufacturer's name and type of products.
- B. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
- C. Store hydrated lime in manufacturer's original and unopened containers. Discard lime if containers have been damaged or have been opened for more than two days.
- D. Store sand where grading and other required characteristics can be maintained and contamination avoided.

#### 1.12 FIELD CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit repointing work to be performed according to product manufacturers' written instructions and specified requirements.
- B. Cold-Weather Requirements: Comply with the following procedures for mortar-joint pointing unless otherwise indicated:
  - 1. When air temperature is below 40 deg F, heat mortar ingredients and existing stone to produce temperatures between 40 and 120 deg F.
  - 2. When mean daily air temperature is below 40 deg F, provide enclosure and heat to maintain temperatures above 32 deg F within the enclosure for seven days after pointing.
- C. Hot-Weather Requirements: Protect mortar-joint pointing when temperature and humidity conditions produce excessive evaporation of water from mortar materials. Provide artificial shade and wind breaks, and use cooled materials as required to minimize evaporation. Do not apply mortar to substrates with temperatures of 90 deg F and above unless otherwise indicated.

## **PART 2 - PRODUCTS**

# 2.1 MATERIALS, GENERAL

A. Source Limitations: Obtain each type of material for stone repointing (cement, sand, etc.) from single source with resources to provide materials of consistent quality in appearance and physical properties.

#### 2.2 MORTAR MATERIALS

- A. Hydrated Lime: ASTM C 207, Type S.
- B. Mortar Sand: ASTM C 144.
  - 1. Match size, texture, and gradation of existing mortar sand as closely as possible. Blend several sands if necessary to achieve suitable match.
  - 2. Color: Natural sand or ground marble, granite, or other sound stone of color necessary to produce required mortar color.

C. Water: Potable.

#### 2.3 ACCESSORY MATERIALS

- 1. Ground-Mortar Aggregate: Custom crushed and ground pointing mortar sand or existing mortar retrieved from joints. Grind to a particle size that matches the adjacent mortar aggregate and color. Remove all fines passing the No. 100 sieve.
- B. Other Products: Select materials and methods of use based on the following, subject to approval of a mockup:
  - 1. Previous effectiveness in performing the work involved.
  - 2. Minimal possibility of damaging exposed surfaces.
  - 3. Consistency of each application.
  - 4. Uniformity of the resulting overall appearance.
  - 5. Do not use products or tools that could leave residue on surfaces.

#### 2.4 MORTAR MIXES

- A. Measurement and Mixing: Measure cementitious materials and sand in a dry condition by volume or equivalent weight. Do not measure by shovel; use known measure. Mix materials in a clean, mechanical batch mixer.
  - 1. Mixing Pointing Mortar: Thoroughly mix cementitious materials and sand together before adding any water. Then mix again, adding only enough water to produce a damp, unworkable mix that retains its form when pressed into a ball. Maintain mortar in this dampened condition for 15 to 30 minutes. Add remaining water in small portions until mortar reaches desired consistency. Use mortar within one hour of final mixing; do not retemper or use partially hardened material.
- B. Do not use admixtures in mortar unless otherwise indicated.
- C. Mixes: Mix mortar materials in proportions equal to those indicated by testing of historic mortar.

#### **PART 3 - EXECUTION**

#### 3.1 PROTECTION

- A. Prevent mortar from staining face of surrounding stone and other surfaces.
  - 1. Cover sills, ledges, and other projecting items to protect them from mortar droppings.
  - 2. Keep wall area wet below pointing work to discourage mortar from adhering.
  - 3. Immediately remove mortar splatters in contact with exposed stone and other surfaces.

- B. Remove downspouts and associated hardware adjacent to stone and store during stone repointing. Reinstall when repointing is complete.
  - 1. Provide temporary rain drainage during work to direct water away from building.

# 3.2 STONE REPOINTING, GENERAL

A. Appearance Standard: Repointed surfaces are to have a uniform appearance as viewed from 20 feet away by Architect.

#### 3.3 REPOINTING STONEWORK

- A. Rake out and repoint joints to the following extent:
  - 1. All joints in areas indicated.
  - 2. Joints at locations of the following defects:
    - a. Holes and missing mortar.
    - b. Cracks that can be penetrated 1/4 inch or more by a knife blade 0.027 inch thick
    - c. Cracks 1/16 inch or more in width and of any depth.
    - d. Hollow-sounding joints when tapped by metal object.
    - e. Eroded surfaces 1/4 inch or more deep.
    - f. Deterioration to point that mortar can be easily removed by hand, without tools.
    - g. Joints filled with substances other than mortar.
- B. Do not rake out and repoint joints where not required.
- C. Rake out joints as follows, according to procedures demonstrated in approved mockup:
  - 1. Remove mortar from joints to depth of 2 times joint width but not less than 1/2 inch or not less than that required to expose sound, unweathered mortar. Do not remove unsound mortar more than 2 inches deep; consult Architect for direction.
  - 2. Remove mortar from stone surfaces within raked-out joints to provide reveals with square backs and to expose stone for contact with pointing mortar. Brush, vacuum, or flush joints to remove dirt and loose debris.
  - 3. Do not spall edges of stone units or widen joints. Replace or patch damaged stone units as directed by Architect.
- D. Notify Architect of unforeseen detrimental conditions including voids in mortar joints, cracks, loose stone, rotted wood, rusted metal, and other deteriorated items.
- E. Pointing with Mortar:

- 1. Rinse joint surfaces with water to remove dust and mortar particles. Time rinsing application so, at time of pointing, joint surfaces are damp but free of standing water. If rinse water dries, dampen joint surfaces before pointing.
- 2. Apply pointing mortar first to areas where existing mortar was removed to depths greater than surrounding areas. Apply in layers not greater than inch until a uniform depth is formed. Fully compact each layer, and allow it to become thumbprint hard before applying next layer.
- 3. After deep areas have been filled to same depth as remaining joints, point joints by placing mortar in layers not greater than ¼ inch. Fully compact each layer and allow to become thumbprint hard before applying next layer. Where existing stone has worn or rounded edges, slightly recess finished mortar surface below face of stone to avoid widened joint faces. Take care not to spread mortar beyond joint edges onto exposed stone surfaces or to featheredge the mortar.
- 4. When mortar is thumbprint hard, tool joints to match original appearance of joints as demonstrated in approved mockup. Remove excess mortar from edge of joint by brushing.
- 5. Cure mortar by maintaining in thoroughly damp condition for at least 72 consecutive hours, including weekends and holidays.
- 6. Hairline cracking within mortar or mortar separation at edge of a joint is unacceptable. Completely remove such mortar and repoint.
- F. Where repointing work precedes cleaning of existing stone, allow mortar to harden at least 30 days before beginning cleaning work.

### 3.4 FINAL CLEANING

- A. After mortar has fully hardened, thoroughly clean exposed stone surfaces of excess mortar and foreign matter; use wood scrapers, stiff-nylon or -fiber brushes, and clean water, applied by low-pressure spray.
  - 1. Do not use metal scrapers or brushes.
  - 2. Do not use acidic or alkaline cleaners.
- B. Clean adjacent nonstone surfaces. Use detergent and soft brushes or cloths.
- C. Remove masking materials, leaving no residues that could trap dirt.

## **END OF SECTION**

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## **SECTION 06130**

#### **TIMBER FRAMING**

#### **PART 1 - GENERAL**

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of contract, including general and supplementary conditions and Division 1 specification sections, apply to this section.

#### 1.2 WORK INCLUDED

- A. Work includes furnishing labor, materials, and equipment to design, furnish, and install structural and architectural timber framing as detailed in drawings or specified, including structural design of timber frame system, joinery, and connections not provided in drawings, and supplying associated fasteners to complete system and connect timber framing members to structural supports.
- B. Types of timber construction specified in this section include the following:
  - 1. Beams, girders, plates, sills, and joists.
  - 2. Columns and posts, braces and bolsters.
  - 3. Solid wood decking.

## 1.3 RELATED WORK

- A. The following sections are related to work of this section:
  - 1. Section 06201 Finish Carpentry.
  - 2. Section 06312-Historic Wood Repair

### 1.4 DEFINITIONS

- A. Inspection Agencies and abbreviations used to reference them include the following:
  - 1. NELMA Northeastern Lumber Manufacturers Association.
  - 2. NHLA National Hardwood Lumber Association.
  - 3. NLGA National Lumber Grades Authority.

# 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Schedule timber delivery and installation to avoid extended on-site storage.
- B. Keep timber members dry during delivery and storage. Cover timber with weathertight tarps. Do not store members in areas of high or low relative humidity.
- C. Cut and stack timber so as not to encourage growth of sap-stain fungi, mold, carpenter ants, borers, etc.
- D. Stack timbers with spacers between each bundle to provide air circulation. Provide for air circulation around stacks and under coverings.

## 1.6 SUBMITTALS

- A. Shop Drawings: Submit for review shop drawings signed and sealed by a Structural Engineer registered in state where project is located. Show design loads, material properties, full dimensions of each member, and layout of timber frame system. Show large-scale details of joints and connections. Provide hardware cut sheets and design values for fasteners.
- B. Samples: Full width and depth, 24 inches long, showing range of variation expected in appearance, including surface texture and finish of wood products.
- C. Provide manufacturer's certification of moisture content.

## 1.7 OUALITY ASSURANCE

- A. Fabricator and Erector of timber framing shall not have less than ten years experience in fabrication and erection of timber framing.
- B. Timbers shall be graded by lumber grading agency certified by American Lumber Standards Committee.
- C. Locate grade stamp on timber surfaces not exposed to view in completed work. Grade certification can be submitted in lieu of grade stamping material.

## **PART 2 - PRODUCTS**

## 2.1 GENERAL

A. General: Comply with PS 20 and grading rules of lumber grading agencies certified by American Lumber Standards Committee Board of Review as applicable.

- 1. Factory mark each item of timber with grade stamp of grading agency.
- 2. For exposed timber indicated to receive stained or natural finish, apply grade stamps to surfaces not exposed to view, or omit grade stamps and provide certificates of grade compliance issued by grading agency.

# B. Preservative Treatment:

- 1. For sawn products, pressure treat timbers as required in architectural and structural drawings and within this section with preservative treatment to comply with AWPA U1-04 Use Category System, Commodity Specification A, Sawn Products. See Section 06071 for treatments and related requirements.
  - a. List products to be treated.
  - b. Products to be treated after fabrication.
  - c. Specify conditioning (air dry, kiln dry, etc.), packaging, and handling after treating.
  - d. Specify treatment for post-treating fabrication.

## 2.2 TIMBER

- A. Timber Species and Grade: Species to match existing and meet grading requirements of Select Structural Lumber.
- B. Grading Rules: NELMA, NHLA, NLGA
- C. For large (10 inch or greater maximum dimension) members, use box heart timbers. For small (less than 10 inch maximum dimension) members, use free of heart center timbers. Do not use timber with excessive reaction wood.
- D. Moisture Content: Provide timber with 19 percent maximum moisture content 3 inches from surface at time of installation. Dressing: Provide timber that is rough sawn (Rgh) to match existing timbers.
- F. End Sealer: Manufacturer's standard, transparent, colorless wood sealer effective in retarding transmission of moisture at cross-grain cuts and compatible with finish.

## 2.3 FASTENERS

- A. General: Provide fasteners of size and type complying with requirements specified for material and manufacture.
  - 1. Where fasteners are exposed to weather, in ground contact, pressure-preservative treated, or in area of high relative humidity, provide Type 304 stainless steel.
- B. Wood Screws: ASME B18.6.1.

- C. Proprietary Fasteners:
  - 1. RSS structural screws by GRK or accepted equivalent.
  - 2. Timberlok fasteners by FastenMaster or accepted equivalent.
  - 3. Strong Drive screws (SDS) by Simpson Strong-tie or accepted equivalent.
  - 4. WFC/WFR/WFD fasteners by SFS intec or accepted equivalent.
- D. Lag Bolts: ASME B18.2.1.
- E. Bolts: Steel bolts complying with ASTM A 307, Grade A; with ASTM A 563 hex nuts and, where indicated, flat washers.
- F. Threaded Rods: ASTM A 36.
- G. Expansion Anchors: Anchor bolt and sleeve assembly of material indicated below with capability to sustain a load equal to 6 times the load imposed when installed in unit masonry assemblies and equal to 4 times the load imposed when installed in concrete as determined by testing in accordance ASTM E 488, performed by a qualified independent testing and inspecting agency.
  - 1. Material: Carbon-steel components, zinc-plated to comply with ASTM B 633, Class Fe/Zn 5.

# H. Other proprietary connectors:

- 1. Timberlinx steel connectors by Timberlinx, Division of Michael Preston Distributors Limited or accepted equivalent.
- 2. Other.

# 2.4 STEEL CONNECTION MATERIALS

- A. Unless otherwise indicated, fabricate steel connection materials and steel elements from the following materials:
  - 1. Structural-steel shapes, plates, and flat bars complying with ASTM A 36.
  - 2. Round steel bars complying with ASTM A 575, Grade M 1020.
  - 3. Hot-rolled steel sheet complying with ASTM A 1011, Structural Steel, Type SS, Grade 33
  - 4. Stainless steel plate and flat bars complying with ASTM A 666, Type 304
  - 5. Stainless steel bars and shapes complying with ASTM A 276, Type 304
  - 6. Stainless steel sheet complying with ASTM A 666, Type 304

#### B Finish:

1. Where not exposed to weather, finish steel assemblies and fasteners with rust-inhibitive primer, 2-mil dry film thickness.

2. Where exposed to weather, hot-dip galvanize steel assemblies and fasteners after fabrication to comply with ASTM A 123/A 123M or ASTM A 153/A 153M.

## 2.5 FABRICATION

- A. Shop fabricate members by cutting and restoring exposed surfaces to match specified surfacing. Predrill for fasteners and assembly of units.
  - 1. Finish exposed surfaces to provide smooth finish. Surface texture shall be equivalent to that of adjacent historic surfaces.
  - 2. Where preservative-treated members are specified, fabricate before treatment to greatest extent possible. Where fabrication must be done after treatment, apply field-treatment preservative to comply with AWPA M4.
    - a. Use inorganic boron treatment for members not in contact with ground and continuously protected from water.
- B. Camber: Fabricate horizontal members and inclined members with slope of less than 1:1 with natural convex bow (crown) up to provide camber.
- C. Timber sizes are to match adjacent timber framing dimensionsat the time of installation. Plane, adze, or otherwise dress timber to square, uniform dimension at joinery locations. Dressed dimensions shall be equal to member replaced or repaired.
- D. Waney edges are permitted provided they do not exceed 1/8 of a face..
- E. Timbers with moderate bow are permitted where their intended use will straighten them. Place crowns up for spanning members. Do not use severely bowed timbers or timbers bowed in more than one direction.
- F. Remove staining from soil, oil, or grease.
- G. Cut joints accurately to make neat, snug fit.

## **PART 3 - EXECUTION**

## 3.1 INSTALLATION, GENERAL

A. General: Erect heavy timber construction true and plumb. Provide temporary bracing to maintain lines and levels until permanent supporting members are in place.

- B. Handle and temporarily support heavy timber construction to prevent surface damage, compression, and other effects that might interfere with indicated finish. Tools used to drive or pull joints together shall not mar finished surface of timber.
- C. Framing adjacent to masonry: Provide 1/2-inch clearance at tops, sides, and ends of members adjacent to masonry unless otherwise indicated.
- D. Cutting: Avoid extra cutting after fabrication. Where field fitting is unavoidable, comply with finish and preservative treatment requirements for shop fabrication.

## 3.2 STRUCTURAL TESTS AND INSPECTIONS

A. Notify Special Inspector when structural framing is complete. Timber framing shall be inspected and approved prior to enclosing walls, floors, roofs, or ceilings.

## 3.3 ADJUSTING AND CLEANING

A. Repair damaged surfaces and finishes after completing erection. Replace damaged heavy timber construction if repairs are not approved by Architect.

**END OF SECTION 06130** 

## **SECTION 06201**

## EXTERIOR FINISH CARPENTRY

#### PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section Includes:
  - 1. Exterior wood trim.
  - 2. Lumber siding.

# 1.2 ACTION SUBMITTALS

A. Samples: For each type of product involving selection of colors, profiles, or textures.

## **PART 2 - PRODUCTS**

# 2.1 MATERIALS, GENERAL

- A. Lumber: DOC PS 20.
  - 1. Factory mark each piece of lumber with grade stamp of inspection agency indicating grade, species, moisture content at time of surfacing, and mill.
    - a. For exposed lumber, mark grade stamp on end or back of each piece, or omit grade stamp and provide certificates of grade compliance issued by inspection agency.

## 2.2 EXTERIOR TRIM

- A. Lumber Trim:
  - 1. Species and Grade: Western red cedar, Grade A; NLGA, WCLIB, or WWPA.
  - 2. Maximum Moisture Content: 19 percent.
  - 3. Face Surface: Surfaced (smooth).
- B. Moldings: WMMPA WM 4, N-grade wood moldings, without finger jointing. Made from kiln-dried stock to patterns included in WMMPA WM 12.
  - 1. Species: Western red cedar

### 2.3 LUMBER SIDING

- A. Provide kiln-dried lumber siding complying with DOC PS 20.
- B. Species and Grade: Grade A western red cedar; NLGA, WCLIB, or WWPA.

#### 2.4 MISCELLANEOUS MATERIALS

- A. Fasteners for Exterior Finish Carpentry: Provide nails or screws, in sufficient length to penetrate not less than 1-1/2 inches into wood substrate.
  - 1. For applications not otherwise indicated, provide stainless-steel fasteners.
- B. Sealants: Latex, complying with ASTM C 834 Type OP, Grade NF and with applicable requirements in Section 079200 "Joint Sealants," recommended by sealant manufacturer and manufacturer of substrates for intended application.

#### **PART 3 - EXECUTION**

### 3.1 PREPARATION

A. Prime lumber, trim and moldings to be painted, including both faces and edges, unless factory primed. Cut to required lengths and prime ends. Comply with requirements in Section 09911 "Exterior Painting."

### 3.2 INSTALLATION, GENERAL

- A. Install exterior finish carpentry level, plumb, true, and aligned with adjacent materials. Use concealed shims where necessary for alignment.
  - 1. Scribe and cut exterior finish carpentry to fit adjoining work. Refinish and seal cuts as recommended by manufacturer.

### 3.3 STANDING AND RUNNING TRIM INSTALLATION

- A. Install trim with minimum number of joints practical, using full-length pieces from maximum lengths of lumber available. Do not use pieces less than 24 inches long except where necessary.
  - 1. Use scarf joints for end-to-end joints.
  - 2. Stagger end joints in adjacent and related members.
- B. Fit exterior joints to exclude water. Cope at returns and miter at corners.

### 3.4 SIDING INSTALLATION

- A. Install siding to comply with manufacturer's written instructions.
- B. Lumber Siding: Apply starter strip along bottom edge of sheathing or sill. Install first course of siding with lower edge at least 1/8 inch below starter strip and subsequent courses lapped 1 inch over course below. Nail at each stud. Do not allow nails to penetrate more than one thickness of siding.

**END OF SECTION 06201** 

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#### **SECTION 06312**

#### HISTORIC WOOD REPAIR

### **PART 1 - GENERAL**

### 1.01 SUMMARY

- A. This procedure includes guidance on stabilizing decayed wood members with epoxy consolidant and filler.
- B. Deterioration and decay in wood results from moisture infiltration, accompanying fungal growth and insect infestation. Paint, caulk and sealant failures are also a major cause of wood deterioration.
- C. Some sources of moisture may include the original moisture in green wood, rainwater, condensation, ground water, piped water, and water released by water-conducting fungus through the process of decay itself.
- D. Epoxy repair may be appropriate if:
  - 1. the piece to be repaired is historically significant. Epoxy repair makes it possible to retain most of an original component by selectively repairing only the damaged area.
  - 2. the piece is decorative and replacement would be too expensive or impossible.
- E. Epoxy repair may NOT be appropriate if:
  - 1. the piece is a structural member. Epoxy has adequate compression strength, but is not the best choice to repair a member in tension. In this case, replacement is usually a better option.
  - 2. the wood to be repaired is to remain unpainted, as the epoxy is quite different in appearance than wood. In this case, the wood should be selectively replaced.
  - 3. if the area to be repaired is large, as epoxy repair can be expensive.

#### **PART 2 - PRODUCTS**

#### 2.01 MANUFACTURERS

A. Conservation Services

8 Lakeside Trail Kinnelon, NJ 07405 201/838-6412

- B. Abatron, Inc.5501 95th Ave.Kenosha, WI 53144800/445-1754 or 414/653-2000
- C. Roux Laboratories 5344 Overmyer Dr. Jacksonville, FL 32205 904/693-1200
- D. ConServ Epoxy, LLC PO Box 454 Northford, CT 06472 203/484-4123

### 2.02 MATERIALS

- A. Epoxy consolidant and epoxy filler, both are multiple part compounds. Purchase by the gallon unless a large amount of epoxying needs to be done. Use one of the following, or approved equal:
  - 1. "Con Serv (T) Flexible Consolidant 100" (Conservation Services): Cures slowly with a 5 to 7 hour application time to allow deep penetration. Complete hardness is achieved in 3 to 6 days.
  - 2. "Con Serv (T) Flexible Patch 200" (Conservation Services): A four part putty- like filler; Is not easy to mix in small amounts; Consistency and hardness are easily controlled with this material.

NOTE: The products of Conservation Services are recommended for treatment of thicker wood such as window sills. Because of its slower curing time, it allows for deeper penetration into members.

- 3. "Liquidwood-1" Consolidant (Abatron): Solidifies in a short period of time.
- 4. "Woodepox-2" Adhesive Paste (Abatron): A two-part paste mix; final hardness is determined by varying the ratio of the two parts. The LiquidWood can be used as a thinner, but this reduces the flexibility of the filler.

NOTE: These Abatron products are recommended for use on smaller members such as window sashes where deep penetration of consolidant is not required. The quick drying feature is an advantage for small, but repetitive, jobs. Abatron carries twenty different types of wood consolidants with varying degrees of penetration.

- B. Oil clay that can be purchased from a hobby store used to keep consolidant from leaking through cracks.
- C. Nitril Rubber Gloves (Abatron)
- D. Disposable vinyl gloves: Available from drug store or pharmaceutical supply distributor in 50 count or larger boxes.

## 2.03 EQUIPMENT

- A. Plastic bottles, like those used for hair dye, to the consolidant; having many on hand is recommended. Cleaning of the bottles for reuse is possible.
- B. Applicator bottles: Available from drug store and sold for hair dye application usually in 8 fl. oz. size; Also available in bulk from Roux Laboratories. Roux Color Applicators lend themselves more easily to cleaning and reuse.
- C. Rags of different sizes to wipe up spills before epoxy has a chance to harden, small rags are recommended for quick one time uses such as wiping off spouts and caps.
- D. Thin wooden sticks, approximately 8" long for scooping out paste and mixing consolidant
- E. Goggles and a respirator for protection from fumes.
- F. Putty knives for application of filler
- G. Channel lock pliers for opening stuck caps
- H. Allen wrench to clean out cap holes
- I. Needle nose pliers to pull out hardened epoxy
- J. 1/8"x8"x12" Masonite boards for mixing paste filler
- K. Carbon dioxide fire extinguisher: Curing epoxy creates heat that may cause fire
- L. Rotary saw

- M. Air compressor
- N. Drill
- O. Stiff bristle brushes

### **PART 3 - EXECUTION**

### 3.01 EXAMINATION

- A. Detect rot using the "Pick Test":
  - 1. Insert an ice pick into the wood at a slight angle.
  - 2. Lift the pick out. If the wood splinters in long pieces, the wood is ok. If the wood snaps where the pick is being lifted, the wood is decayed.
- B. When rot is discovered:
  - 1. Determine the source of moisture infiltration and eliminate it.
    - a. If rot is only present on the surface, drying is all that is necessary to stop the spread of decay and kill off any growth.
  - 2. If source of moisture is unknown, treat the wood with a preservative.
    - a. Preservatives are caustic chemicals and should be handled with care.
    - b. A particularly dangerous wood preserving chemical is pentachlorophenol (a.k.a. penta).

CAUTION: THIS CHEMICAL IS CARCINOGENIC AND ITS USE IS BANNED IN MANY STATES.

3. Preservatives will eliminate fungal growth, but generally do not restore strength to the deteriorated wood material.

### 3.02 PREPARATION

- A. Surface Preparation:
  - 1. Dry affected wood member completely to arrest further decay. Dry in place if possible –or remove the member and keep in a cool dry place until dry.

CAUTION: IF THIS PRECAUTION IS NOT TAKEN, THE EPOXY CAN

# ACTUALLY TRAP MOISTURE IN WOOD FIBERS AND ACCELERATE THE DECAY PROCESS

- 2. Have all materials at hand before the mixing process begins.
- 3. Label all caps and lids so that a cap or lid is not placed on the wrong container or it may remain there permanently.

### 3.03 ERECTION, INSTALLATION AND APPLICATION

CAUTION: AS EPOXIES CURE, HEAT IS PRODUCED. FOR THIS REASON, EPOXIES SHOULD BE USED IN SMALL QUANTITIES TO DETER EXTENSIVE HEAT BUILD-UP. CARE SHOULD BE TAKEN WHEN USING EPOXY ON A HOT DAY

- A. Repair decayed wood using epoxy wood consolidant:
  - 1. Drill 1/4" or 3/16" holes in affected wood to receive epoxy consolidant:
    - a. Drill holes at an angle and spaced approximately 2" on center in staggered rows. The top of one hole should line up with the bottom of the next hole.

CAUTION: BE SURE NOT TO DRILL THROUGH THE ENTIRE SURFACE FOR CONSOLIDANT WILL LEAK OUT FROM BEHIND.

- b. Dam any surface cracks with oil clay so that epoxy will not leak.
- 2. Remove sawdust and dirt from drilled holes using compressed air or stiff bristle brushes
- 3. Following manufacturer's instructions, mix a small amount of the consolidant components (resin and hardener) together in an applicator bottle. Stir the mixture thoroughly by hand with a thin stick for 4 minutes or with a bent coat hanger chucked into a drill for 2 minutes.
- 4. Using a large plastic syringe or squeeze bottle and tube spout, carefully squirt the consolidant into the pre-drilled holes. Completely saturate the wood, moving from hole to hole refilling until the wood can hold no more. More than one application may be needed.
- 5. Wipe off any excess consolidant or spills and cover the treated area to protect until cured as directed by epoxy manufacturer.
- 6. If severed pieces need to be re-attached, glue them in place with a mixture of consolidant and filler.

- B. When the consolidant has cured, fill the voids in the surface with epoxy filler (wood-epoxy putty):
  - 1. Mix the two part epoxy filler following the same procedures for mixing consolidant in Section 3.03 A.3. above. Mix filler to achieve the consistency of a glazing compound that can be worked with a putty knife.
  - 2. Apply the filler to the surface:
    - a. For large voids, apply filler in 1" thick layers. This reduces the possibility of problems associated with heat build-up.
    - b. Build up filler layers slightly above the wood surface to allow for planing and sanding smooth after it has cured.
  - 3. When the filler has cured, sand or plane the surface smooth.
  - 4. Apply a wood preservative to surrounding wood surfaces and prime and paint the entire surface.

#### END OF SECTION

### **SECTION 07710**

### MANUFACTURED ROOF SPECIALTIES

#### PART 1 - GENERAL

### 1.1 SUMMARY

- A. Section Includes:
  - 1. Roof-edge drainage systems.

### 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each type of roof specialty and for each color and texture specified.

### 1.3 CLOSEOUT SUBMITTALS

A. Maintenance Data: For roofing specialties to include in maintenance manuals.

### **PART 2 - PRODUCTS**

### 2.1 PERFORMANCE REQUIREMENTS

A. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes to prevent buckling, opening of joints, hole elongation, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Provide clips that resist rotation and avoid shear stress as a result of thermal movements. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

### 2.2 ROOF-EDGE DRAINAGE SYSTEMS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. All Copper Manufacturing
  - 2. Berger Building Products, Inc.
  - 3. CopperCraft by FABRAL; a Euramax company
  - 4. Specialty Design and Manufacturing

- 5. World Gutter Systems
- B. Gutters: Manufactured in uniform section lengths not exceeding 12 feet, with matching corner units, ends, outlet tubes, and other accessories. Elevate back edge at least 1 inch above front edge. Furnish flat-stock gutter straps, gutter brackets, expansion joints, and expansion-joint covers fabricated from same metal as gutters.
  - 1. Copper Sheet: 16 oz./sq. ft.
  - 2. Gutter Profile: Style K according to SMACNA's "Architectural Sheet Metal Manual"
  - 3. Corners: Factory mitered and field soldered.
  - 4. Gutter Supports: Gutter brackets and Straps with finish matching the gutters.
  - 5. Gutter Accessories: Bronze wire ball downspout strainer and Flat ends.
- C. Downspouts: Plain round complete with smooth-curve elbows, manufactured from the following exposed metal. Furnish with metal hangers, from same material as downspouts, and anchors.
  - 1. Copper: 16 oz./sq. ft.
- D. Copper Finish: Non-patinated, mill.

#### 2.3 MATERIALS

A. Copper Sheet: ASTM B 370, cold-rolled copper sheet, H00 or H01 temper.

### 2.4 MISCELLANEOUS MATERIALS

- A. Fasteners: Manufacturer's recommended fasteners, suitable for application and designed to meet performance requirements. Furnish the following unless otherwise indicated:
  - 1. Fasteners for Copper Sheet: Copper, hardware bronze, or passivated Series 300 stainless steel.
- B. Solder for Copper: ASTM B 32, lead-free solder.

## 2.5 FINISHES

- A. Copper Sheet Finishes:
  - 1. Non-Patinated Finish: Mill finish.

#### **PART 3 - EXECUTION**

## 3.1 INSTALLATION, GENERAL

- A. General: Install roof specialties according to manufacturer's written instructions. Anchor roof specialties securely in place, with provisions for thermal and structural movement. Use fasteners, solder, protective coatings, separators, underlayments, sealants, and other miscellaneous items as required to complete roof-specialty systems.
  - 1. Install roof specialties level, plumb, true to line and elevation; with limited oil-canning and without warping, jogs in alignment, buckling, or tool marks.
  - 2. Provide uniform, neat seams with minimum exposure of solder and sealant.
  - 3. Install roof specialties to fit substrates and to result in weathertight performance. Verify shapes and dimensions of surfaces to be covered before manufacture.
  - 4. Torch cutting of roof specialties is not permitted.
  - 5. Do not use graphite pencils to mark metal surfaces.
- B. Metal Protection: Protect metals against galvanic action by separating dissimilar metals from contact with each other or with corrosive substrates by painting contact surfaces with bituminous coating or by other permanent separation as recommended by manufacturer.
- C. Expansion Provisions: Allow for thermal expansion of exposed roof specialties.
  - 1. Space movement joints at a maximum of 12 feet with no joints within 18 of corners or intersections unless otherwise indicated on Drawings.
  - 2. When ambient temperature at time of installation is between 40 and 70 deg F, set joint members for 50 percent movement each way. Adjust setting proportionately for installation at higher ambient temperatures.
- D. Soldered Joints: Clean surfaces to be soldered, removing oils and foreign matter. Pre-tin edges of sheets to be soldered to a width of 1-1/2 inches; however, reduce pre-tinning where pre-tinned surface would show in completed Work. Tin edges of uncoated copper sheets using solder for copper. **Do not use torches for soldering**. Heat surfaces to receive solder and flow solder into joint. Fill joint completely. Completely remove flux and spatter from exposed surfaces.

### 3.2 ROOF-EDGE DRAINAGE-SYSTEM INSTALLATION

- A. General: Install components to produce a complete roof-edge drainage system according to manufacturer's written instructions. Coordinate installation of roof perimeter flashing with installation of roof-edge drainage system.
- B. Gutters: Join and seal gutter lengths. Allow for thermal expansion. Attach gutters to firmly anchored gutter supports spaced not more than 30 inches apart. Attach ends with rivets and solder to make watertight. Slope to downspouts.

- 1. Install gutter with expansion joints at locations indicated but not exceeding 50 feet apart. Install expansion-joint caps.
- C. Downspouts: Join sections with manufacturer's standard telescoping joints. Provide hangers with fasteners designed to hold downspouts securely to walls and 1 inch away from walls; locate fasteners at top and bottom and at approximately 60 inches o.c.
  - 1. Connect downspouts to underground drainage system indicated.

### 3.3 CLEANING AND PROTECTION

- A. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.
- B. Clean and neutralize flux materials. Clean off excess solder and sealants.
- C. Remove temporary protective coverings and strippable films as roof specialties are installed.

### **END OF SECTION 07710**

### **SECTION 07920**

### **JOINT SEALANTS**

#### PART 1 - GENERAL

### 1.1 SUMMARY

- A. This Section includes joint sealants for the following applications, including those specified by reference to this Section:
  - 1. Exterior joints in vertical surfaces and horizontal non-traffic surfaces.

### 1.2 PERFORMANCE REQUIREMENTS

A. Provide elastomeric joint sealants that establish and maintain watertight and airtight continuous joint seals without staining or deteriorating joint substrates.

### 1.3 SUBMITTALS

A. Product Data: For each joint-sealant product indicated.

### 1.4 WARRANTY

- A. Special Installer's Warranty: Installer's standard form in which Installer agrees to repair or replace elastomeric joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
  - 1. Warranty Period: Two years from date of Substantial Completion.
- B. Special Manufacturer's Warranty: Manufacturer's standard form in which elastomeric sealant manufacturer agrees to furnish elastomeric joint sealants to repair or replace those that do not comply with performance and other requirements specified in this Section within specified warranty period.
  - 1. Warranty Period: Two years from date of Substantial Completion.

### **PART 2 - PRODUCTS**

#### 2.1 MANUFACTURERS

A. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, products listed in other Part 2 articles.

### 2.2 MATERIALS, GENERAL

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer, based on testing and field experience.
- B. VOC Content of Interior Sealants: Provide interior sealants and sealant primers that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24):
  - 1. Sealants: 250 g/L.
  - 2. Sealant Primers for Nonporous Substrates: 250 g/L.
  - 3. Sealant Primers for Porous Substrates: 775 g/L.
- C. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.

#### 2.3 ELASTOMERIC JOINT SEALANTS

- A. Elastomeric Sealants: Comply with ASTM C 920 and other requirements indicated for each liquid-applied chemically curing sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.
- B. Stain-Test-Response Characteristics: Where elastomeric sealants are specified to be nonstaining to porous substrates, provide products that have undergone testing according to ASTM C 1248 and have not stained porous joint substrates indicated for Project.
- C. Single-Component Silicone Sealant:
  - 1. Products:
    - a. Dow Corning Corporation
    - b. GE Silicones
    - c. Tremco

### d. Pecora Corporation

### 2.4 LATEX JOINT SEALANTS

- A. Latex Sealant: Comply with ASTM C 834, Type O P, Grade NF.
- B. Products:
  - 1. Bostik Findley; Chem-Calk 600.
  - 2. Pecora Corporation; AC-20+.
  - 3. Schnee-Morehead, Inc.; SM 8200.
  - 4. Sonneborn, Division of ChemRex Inc.; Sonolac.
  - 5. Tremco; Tremflex 834.

#### **PART 3 - EXECUTION**

### 3.1 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants
  - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant.
    - a. Clean porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air.
  - 2. Remove laitance and form-release agents from concrete.
    - a. Clean nonporous surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants.
- B. Joint Priming: Prime joint substrates, where recommended in writing by joint-sealant manufacturer, based on preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces
- C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such

contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

### 3.2 INSTALLATION

- A. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- B. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- C. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
  - 1. Place sealants so they directly contact and fully wet joint substrates.
  - 2. Completely fill recesses in each joint configuration.
  - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- D. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
  - 1. Remove excess sealant from surfaces adjacent to joints.
  - 2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
  - 3. Provide concave joint configuration per Figure 5A in ASTM C 1193, unless otherwise indicated.
- E. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

#### **END OF SECTION 07920**

#### **SECTION 09911**

### **PAINTING**

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. The general provisions of the Contract, annotated project photographs, drawings and any other related Construction Documents apply to the work specified in this section.

### 1.2 SUMMARY OF WORK

A. Remove existing paint, prepare wood surfaces, prime and finish paint exterior cladding and trim where indicated

### 1.3 REFERENCES AND STANDARDS

- A. Publications listed below shall be the most recent issue and will form a part of this Specification to the extent referenced.
  - 1. Protection of site and historic properties:
    - a. All work shall be performed in accordance with the "Secretary of the Interior's Standards for Rehabilitation, National Park Service, 1995." The standards can be found at:

http://www.nps.gov/history/hps/tps/standguide/overview/choose\_treat.htm

- 2. American Society for Testing and Materials (ASTM):
  - a. D16-03 Standard Terminology for Paint, Related Coatings, Materials, and Applications.

### 1.4 TESTING

- A. Engage an Architectural Conservation Lab or other testing laboratory approved by the Owner's Representative to perform tests specified below.
- B. Submit information regarding testing laboratory's facilities and qualifications of technical personnel to Owner's Representative for approval prior to sending out samples.
- C. Obtain the approval of the Owner's Representative regarding the proposed location of paint sampling prior to sample removal.
- D. Testing shall give an analysis of the paint. This will include chromochronology, to study the colors and sequences of all the coating layers on the surfaces of architecturally significant elements and building surfaces.
  - 1. Paint analysis reports shall have photomicrographs of all paint samples.
  - 2. Samples should be mounted and returned to the Owner with the report.
  - 3. The report should include a paint chronology for all paint layers on the sampled surface. Match each layer to the Munsell color notation system.

- 4. Provide 3" x 5" color chips from approved paint manufacturers for the earliest and most current color scheme.
- E. Information from the paint analysis shall guide the product selection and the paint schedule.
- F. Do not use materials until laboratory test reports are approved by Owner's Representative.
- G. After tests have been made and materials approved, do not change without additional testing and approval of Owner's Representative.

## 1.5 QUALITY ASSURANCE

- A. Contractor performing the work of this section shall have a minimum of 10 years experience in painting historic buildings similar in material, design, and extent to that indicated for this project. The Contractor shall have successfully completed a minimum of 5 projects utilizing the methods and materials specified for this project.
- B. Contractor shall submit a statement describing experience and qualifications of the firm and of key personnel who will work on this project; include technicians, craftsmen and artisans. Include names and addresses of projects successfully completed and for each include the name, address, and phone numbers of the owner, and architect if any.
- C. Contractor to maintain an experienced full-time supervisor on the project site during times that painting is in progress.
- D. Contractor to employ a Carpenter with 10 years experience in the treatment and repair of historic wood structures similar in size and scope to this project. The Carpenter shall have successfully completed a minimum of 5 projects utilizing the methods and materials specified for this project.
- E. Obtain all paint from one manufacturer, at the same time, and from the same distributor to ensure homogeneity of manufacture and formula.
  - 1. All materials will be used according to manufacturer's specifications and standard industry practices.
  - 2. Contractor shall ensure that all project materials are protected from adverse weather during construction.
- F. In addition to the requirements of these specifications, comply with manufacturer's instructions and recommendations for all phases of Work, including preparation of substrate, application of materials, and protection of installed material.
- G. Mockups: Prepare field samples for restoration methods to demonstrate aesthetic effects and quality of materials and execution. Use materials and methods proposed for

completed Work and prepare samples under same weather conditions to be expected during remainder of Work.

- 1. Locate mockups on the building where directed by Owner's Representative.
- 2. Notify Owner's Representative 7 days in advance of the dates ad times when samples will be prepared.
- 3. The Contractor shall prepare sample installations for each of the painting types indicated. Panels should be chosen in discrete locations to represent the conditions of the building as a whole. Sample installations will serve to determine the time required for project completion and the suitability of materials used. Owner's Representative shall approve locations of test panels for each type of finish and surface.
- 4. On a clean surface, create both a test panel showing paint removal and a test panel showing the surface preparation and painting of each.
- 5. Approved sample installations will become part of the Work and serve as the quality standard for similar type work on this project. Additional sample installations, up to a maximum of 3 for each type of installation, shall be prepared if necessary to obtain satisfactory results at no additional cost to the Client.
- 6. Report any proposed changes from procedures and materials used in original Field Mockup. Submit new sample having same dimensions and texture as original Field Mockup for review. Upon acceptance, construct another Field Mockup with new materials and procedures for acceptance prior to proceeding further with the restoration work.
- 7. Maintain mockups in an undisturbed condition during construction as a standard for judging the completed Work.
- 8. If personnel changes during the progress of the work, new sample installations shall be prepared by persons doing the work.

### 1.6 PROJECT MANAGEMENT

A. Documentation and Communication: Contractor shall create reports based on details uncovered during the Project work not already outlined in the specifications. Work shall be photographed by Contractor when Owner is not on site. Photographs shall be 300 dpi minimum. Details and suggested repair options shall be photo documented and submitted to the Owner for review.

### 1.7 SUBSTITUTIONS

- A. Owner's Approval Required:
  - 1. The Owner will consider proposals for substitution of materials, equipment and methods only when such proposals are accompanied by full and complete technical data and all other information required.
  - 2. Do not substitute materials, equipment or methods unless such substitution has been specifically approved in writing for this work by the Owner.

#### 1.8 SUBMITTALS

- A. Submit qualifications for all contractors that will work on the project that have not been pre-approved prior to the start of the project. This shall include all qualifications for testing laboratories.
- B. Submit all testing reports and samples.
- C. Submit current color chips of paint manufacturer(s) for color selection. Color is to match existing coating in color, texture, and final appearance. Final color selection must be approved by Owner's Representative.
- D. Submit manufacturer's product data and Materials Safety Data Sheets (MSDS) for each product indicated.
- E. Submit manufacturer's written warranty.
- F. At project completion, a minimum of 1 quart of each type and color of paint/primer from the same production run used will be left, properly labeled and identified, and dated for Owner's later use.

### 1.9 PRODUCT HANDLING

- A. All products shall be stored and installed in a manner which upholds the manufacturer's warranty unless directed to do otherwise by the Owner.
- B. All materials will e delivered to the site in their original containers bearing manufacturer's label and instructions.
- C. Store all materials off the ground, under cover, in a dry location, and comply with recommendations of the manufacturer.

### 1.10 PROJECT CONDITIONS

- A. Preconstruction Conference: Prior to the initiation of any work, meet at the project site with the Contractor, all approved subcontractors, and the Owner to discuss the project. Owner will record the discussions of the conference and issue meeting minutes to each party. Review methods and procedures related to the painting work, including but not limited to the following:
  - 1. Review project requirements (Specifications and Contract Documents).
  - 2. Review required submittals, both completed and vet to be completed.
  - 3. Review availability of materials, trades people, equipment and facilities needed to make progress and avoid delays.
  - 4. Review weather and forecasted weather conditions, and procedures for coping with unfavorable conditions, including the possibility of temporary coverings.
  - 5. Review procedures needed for protection of the building during the remainder of the construction period.
  - 6. Verify all quantities, dimensions and materials in the field.

- B. Weather Condition Limitations: Proceed with work only when weather conditions will permit unrestricted use of materials, ensure quality control and ensure water will not enter the building envelope. All installation procedures must comply with standard construction practices and manufacturer's recommendations where applicable.
- C. Examination of Substrate: The Contractor must examine the substrate and other conditions within which the repairs are to be performed, and notify the Owner of unsatisfactory conditions. Do not proceed with any work until unsatisfactory conditions have been corrected in an acceptable manner and approved by the Owner.

### 1.11 SEQUENCING AND SCHEDULING

- A. Order replacement materials at the earliest possible date to avoid delaying completion of the Work.
- B. Provide a sequencing plan to the Owner's Representative for approval prior to beginning work.

### 1.12 TEMPORARY FACILITIES AND CONSTRUCTION AIDS

A. Temporary Facilities: Contractor is responsible for installation and maintenance of portable toilet; location to be determined with Owner prior to start of project. Portable toilet must be removed within one week following the accepted completion of the work.

## B. Scaffolding:

- 1. Contractor to set up OSHA approved staging if necessary at elevations as outlined in a pre-determined schedule. The schedule shall be subject to the approval of the Owner.
- 2. Scaffolding will remain in place until the accepted completion of the job or a specific portion of the job, and removed within one week of accepted completion of the work
- 3. The Owner will approve the method of attaching the scaffolding to the building, if necessary, prior to scaffolding being erected. Any holes made for attaching scaffolding to the building are to be filled and repaired in a method approved by the Owner.
- C. Dumpster: Contractor to coordinate the installation and removal of construction dumpster for debris. Approved location of dumpster onsite to be determined by the Contractor and Owner.

#### 1.13 PROTECTION

A. Perform all work that disturbs lead-containing paint (LCP), handle all material that involves LCP and transport and dispose of all lead-containing paint and residue in compliance with all applicable federal, state, and local laws and regulations for

identification, removal, labeling, handling, containerization, transportation, and disposal of lead-containing material.

- B. Provide protection for roofs, entrances, windows, walls and landscape as necessary to prevent damage during entire course of work.
- C. Repair or replace to Owner's satisfaction all building elements and materials damaged by weather resulting from openings that did not sufficiently exclude weather at no additional cost.
- D. Provide protective barriers to ensure the safety of visitors and site staff.
- E. Take all necessary precautions to protect all persons, whether engaged in work of this section or not, from all hazards of any kind associated with the work of this section.
- F. Take all necessary precautions to prevent fire and spread of fire.
- G. Provide a properly rated 10 lb. fire extinguisher close by all work areas.
- H. Provide adequate ventilation during use of volatile or noxious substances.
- I. All MSDS are to be available and copies kept onsite until project completion. All persons using materials are to be familiar with information contained within the documents and proper safety precautions are to be followed.

### **PART 2 - PRODUCTS**

### 2.1 Materials:

A. Products listed below represent materials that will be used for painting historic elements. This section assures quality of Work by listing regulatory language and by setting standards of quality for materials. Information from the testing shall guide product selection and restoration procedures.

### 2.2 MANUFACTURERS

- A. Manufacturers for General Coatings are subject to compliance with requirements. Provide products of one of the following:
  - 1. Benjamin Moore and Co., Montvale, NJ
  - 2. Duron Paints, Beltsville, MD
  - 3. Sherman William Paints, Washington DC
- B. Substitutions must be approved by the Owner's Representative.

### 2.3 PREPARATORY MATERIALS

A. Thinners, fillers and related materials shall be as recommended by paint manufacturer for complete application of finishes.

### 2.4 PAINT MATERIALS

- A. Primers or undercoats shall be factory formulated products that are compatible with the substrate and finish paint material specified.
- B. Finish paint shall be factory formulated products that are compatible with the substrate and primer or undercoat paint material specified.

### 2.5 APPLICATION EQUIPMENT

- A. General: For application of approved products, use only such equipment as is recommended for application of the coating by the manufacturer.
- B. Compatibility: Prior to actual use of the application equipment, use all means necessary to verify that the proposed equipment is actually compatible with the material to be applied and that the integrity of the finish will not be jeopardized by use of the proposed application equipment. Contractor to coordinate with the manufacturer's representatives on appropriate tools and equipment.
- C. Other Materials: All other materials, not specifically described but required for a complete and proper installation of the Work of the Section shall be new, first quality of their respective kinds, and as selected by the Contractor subject to the approval of the Owner's Representative.

### **PART 3 - EXECUTION**

### 3.1 GENERAL PROCEDURES

- A. Perform preparations and cleaning procedures in strict accordance with the manufacturer's written instructions and as herein specified, for each substrate condition. Progression of work from preparation to priming and painting shall proceed in a timely fashion so as to not allow time for bared, prepped, or primed, unfinished or incompletely finished substrate to dwell unnecessarily in the weather before receiving finish coats.
- B. The goal of this painting project shall be to provide a very high quality, durable paint finish, while retaining as much of the paint history as possible and protecting the historic substrate from any unnecessary or adverse damage.
- C. Take all necessary precautions to protect building elements and finishes from damage by precipitation during work of this section.

- D. Every effort shall be made to accommodate the reasonable needs of the Owner in relation to scheduling.
- E. Do not apply material when temperature of surface and surrounding areas is below 50 degrees F, unless otherwise permitted by manufacturer's instructions.
- F. Do not apply paint in snow, rain, fog or mist or when the relative humidity exceeds 85%, or to damp or wet surfaces. The moisture content of the surfaces to be painted must be 13% or less. Moisture content will be tested in several areas of each elevation prior to the application of any paint materials.
- G. The site shall be kept clean and free of debris, paint chips, and all equipment. The work area shall be cleaned before work completion each day.

### 3.2 GENERAL PROTECTION

- A. Protect the work of others from damage by the materials, equipment, or tools used for the painting or finishing operations. Contractor shall be responsible for the repair of all damage to the adjacent materials due to the execution of the Work at no additional expense to the Owner. Repairs shall be made by qualified contractors skilled in the type of repairs required to the satisfaction of the Owner's Representative.
- B. Protection shall be non-staining.

### 3.3 EVALUATE SUBSTRATE

- A. Thoroughly assess substrate to determine if any carpentry repairs are necessary prior to beginning the painting project.
- B. Notify Owner if repairs are suggested and identify all locations for review.
- C. Contractor should not perform any repairs prior to consultation with Owner.

### 3.4 MATERIAL PREPARATION FOR PAINT

### A. Cleaning:

- 1. Gentlest means possible should be utilized. Attempt to use water at a pressure less than 60 psi and a natural bristle brush before moving on to a harsher means.
- 2. If stubborn biological staining exists, a 3:1 hot water; bleach mixture should be applied by handheld compression tank sprayer or by hand with a natural brush. Thoroughly rinse the area with clean water at a pressure of less than 60 psi. Surfaces must be allowed to dry at least 48 hours before any material application.
- 3. The use of tri-sodium phosphate (TSP) or other products containing phosphates or sodium (soluble salts) is forbidden.
- 4. Power washing is not permitted.

#### B. Paint Retention:

- 1. Preference shall always be given to retain well adhered paint.
  - a. Retain samples of paint layers in situ as directed by Owner.

### C. Paint Removal:

- 1. Mechanical: Scrape with hand tools all surfaces exhibiting areas of loose or peeling paint, and areas of adhesion failure. Hand sanding after scraping is preferable using a grit no lower than 80, but appropriate to achieve a smooth surface but not remove substrate. Sandpaper should be industrial, open-coat. Random orbital or palm sanders may be used, only following agreement by the Owner, so long as no or very minimal removal of existing substrate results. Any sander must have attached dust collector.
  - a. Sand paper of the appropriate grit should also be used to sand rough or fuzzed areas left after priming, but should not expose substrate.
- 2. Heat: If areas have been specified to be stripped bare of paint, this will be accomplished by use of an infrared heater, scraping or steam. No heat guns will be used on fragments in situ.
- 3. Chemical: Chemical strippers shall be reserved for use in special situations, and shall never be used unless specified according to the scope of work of the contract documents. If a chemical stripper is used, preference will be given to an environmentally friendly product; no methylene chloride strippers shall be used. Chemical strippers shall never be used in situ.

#### D. Wood Treatment:

- 1. For rotted and deteriorated areas requiring wood consolidation, utilize a two-part wood epoxy consolidate applied per manufacturer's written instructions and approved by the Owner. No styrene products should be used.
- 2. If an application of wood treatment is deemed necessary prior to application of paint, the Owner shall approve the product to be used. Products are to be applied according to manufacturer's written instructions and surfaces must be allowed to dry a minimum of 24-48 hours.

#### 3.5 GENERAL FINISH APPLICATION FOR PAINT

- A. Apply paint with brush as best suited for type of material being applied. Apply paint in accordance with manufacturer's directions. Pay particular attention to minimum and maximum times permitted between coats.
- B. The number of coats and film thickness shall be the same regardless of the method of application. Do not apply succeeding coats until previous coat has dried or cured as recommended by paint manufacturer. Give special attention to insure that surfaces, including edges, corners, and crevices receive a dry film thickness equivalent to that of flat surfaces.

- C. Base or prime paint coat shall vary slightly in color from finish coat.
- D. Each coat shall be checked and any imperfections, faulty material, poor workmanship, etc. shall be corrected before applying succeeding coat.
- E. Apply additional coats when undercoats or other conditions show through final coat of paint, until paint film is of uniform finish, color, and appearance, Give special attention to insure that surfaces, including edges, corners, and crevices receive a dry film thickness equivalent to that of flat surfaces. If necessary, sand surfaces lightly between coats to produce desired smoothness and "tooth" for succeeding coat.

### 3.6 PRIMING

- A. Primer shall be Alkyd by manufacturer specified in the "Materials" section of this document and shall be compatible make and composition as finish paint.
- B. Apply primer in accordance with manufacturer's written instructions. Materials to be applied by brush.
- C. Apply each coat at not less than recommended spreading rate to provide the dry film millimeter thickness specified by the manufacturer for each paint coating.
- D. Allow at least 4-24 hours dry time (depending on manufacturer's specification) before proceeding with any additional paint application. Coating failure may result by application of additional paint over non-dry film.
- E. Apply additional coating where undercoats, stains, or other conditions show through paint film, until uniform finish color is achieved.
- F. Exposed nail heads to be spot primed with a rust inhibitor.
- G. New wood shall be primed on all sides (especially end grain) prior to installation. All wood to be installed with ground contact will be treated with wood preservative approved by Owner.
- H. All joints or gaps around doors, windows, or vertical joints of siding where water invasion may occur are to be filled with an approved latex caulk, not to be applied until prime coating is dry. Silicone caulks are not approved. Never caulk horizontal clapboard laps.
- I. All areas indicating stains due to corrosion of hardware shall be, pending Owner approval, removed, properly labeled and stored in an agreed upon location on site. Rust and corrosion shall be removed by wire brush. All surfaces are to be primed with a rust inhibiting primer, and reinstalled after finish painting.

### 3.7 FINISH PAINT

- A. Upon completion of previous treatments, inspect all surfaces prior to paint application. Lightly hand sand rough or fuzzed areas. Care should be taken not to expose substrate or re-priming will be necessary.
- B. Apply two coats of satin finish, Latex Enamel by manufacturer specified in the "Materials" section of this document, film thickness as per material specifications. Upon completion of coat, inspect all surfaces and allow to dry before applying a second coating.
- C. Apply additional paint coating where undercoats, stains, or other conditions show through paint film, until uniform finish color is achieved.
- D. Apply a coat of finish paint to a sample stick for every coat of finish paint applied to the surface. Label the sample stick on the back with the following information:
  - 1. Project name
  - 2. Paint manufacturer
  - 3. Paint type
  - 4. Color name
  - 5. Color formula
  - 6. Sheen
  - 7. Vendor
  - 8. Number of coats
  - 9. Date of application
  - 10. Contractor name

### 3.8 CLEAN-UP

- A. Perform operations so as to keep work areas and premises clean, and free from accumulation of scrap materials, debris and other surplus material (at the end of every workday).
- B. Remove all debris from site and dispose of properly in accordance with all EPA regulations. Recycle debris when possible.
- C. No materials or debris will be permitted to drop free, but shall be removed by use of material hoists, rubbish chutes, or other method approved by the Owner.
- D. No materials or debris will be permitted to be passed through the finished interior without proper protection in a manner approved by the Owner.
- E. The landscape is to be left in as-found or better condition upon the completion of the project.

### 3.9 PAINTING SCHEDULE

- A. Painting scope generally includes the following. It is not necessary to have the paint tested for the purpose of historic matching.
  - 1. New skirt board and new replacement clapboards and trim to be backprimed and primed and painted two finish coats to match existing.
  - 2. New steel doors to be shop primed and field painted two finish coats.
  - 3. New metal handrails to be shop primed and shop or field painted tow finish coats.
  - 4. Interior trim finishes at relocated door and window to be painted to match existing adjacent trim finish.
  - 5. Primed and painted wood base in coat room.
  - 6. Toilet room walls above ceramic tile.
  - 7. Toilet room ceilings.

**END OF SECTION** 

